



An Epidemiological Study of the Relationships
between Exposure to Traumatic Events,
Prevalence of Posttraumatic Stress Disorder
and Alcohol Abuse in Remote Aboriginal
Communities

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For

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Abstract

This epidemiological study explores the relationships between exposure to traumatic events, the prevalence of Posttraumatic Stress Disorder (PTSD), and alcohol abuse in two remote towns and surrounding communities in Central West region of Western Australia. There is ample evidence from the literature indicating that people who are exposed to traumatic events suffer from PTSD, and are more likely to abuse alcohol and other substances. Despite data indicating that Aboriginal people have been exposed to traumatic events at rates higher than the national average, the prevalence of PTSD and its relationship to alcohol abuse has not been investigated adequately. This study explores this relationship using four different instruments: the Composite International Diagnostic Interview (CIDI); the Impact of Events Scale (IES); the Alcohol Use Disorders Identification Test (AUDIT); and the Indigenous Trauma Profile (ITP). A total of 221 subjects, consisting of 104 men and 117 women, took part in the study.

The study found that 97.3% of subjects were exposed to traumatic events and 55.2% met the DSM-IV diagnostic criteria for PTSD. The majority, 73.8% met DSM diagnostic criteria for alcohol abuse and 33.5% of subjects met criteria for alcohol dependence disorder. Cannabis abuse accounted for 23.5% of subjects while 5.9% met criteria for cannabis dependence and 2.7% had abused inhalants. A proportion of subjects also met criteria for mood disorder, including major depressive disorder, recurrent (20%) and single

episode 2.3%, and dysthymic disorder 1.8% and anxiety disorders were 17.2% of subjects. Within the latter group, specific phobia is 47.4%, general anxiety disorder accounts for 26.3%, agoraphobia and panic disorder were the third largest with rate of 7.9% respectively.

The findings establish a relationship between exposure to traumatic events, prevalence of PTSD and alcohol abuse. In subjects with PTSD 91% have alcohol abuse disorder. This accounted for 68.1% of the alcohol abusing population. In this group, onset of PTSD symptoms preceded the onset of alcohol abuse in 67.6% of subjects, evidence of the hypothesis that alcohol abuse is self-medication to suppress symptoms of PTSD. Onset age analysis showed that 69.1% of all PTSD cases and 67.1% of all alcohol abuse cases were identified by the age of 20. This high rate for both PTSD and alcohol abuse at a younger age group indicates exposure to traumatic events at an early age. The study also found that a significant group had subclinical PTSD symptoms: intrusion 76.9%, avoidance 78.7% and hyperarousal 90.04% as shown in IES results.

In conclusion, the rate of exposure to traumatic events and the prevalence of PTSD are higher in these communities than the recorded prevalence in the general population. There is a strong relationship between exposure to traumatic events and prevalence of PTSD and alcohol abuse.

Declaration

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the University Library, being available for photocopying and loan.

Gelaye Tadesse Nadew

I believe that this thesis is properly presented, conforms with to the specification for the degree of sufficient standard to be, *prima facie*, worthy of examination.

Professor Alexander Cowell McFarlane
Principal Supervisor

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Chapter 1: Outline

'Very generally supposed that negroes feel pain to a less degree than Europeans...Their skin seems not so sensitive...Aborigines having a much less developed nervous system, feel pain to a much less extent than we do' (Reynolds, 1996a, 121).

R.W.Felkin, Natalie Robarts and H. Pitts made the above remarks in late 19th and early 20th century.

1.1. Introduction

This epidemiological study explores and describes the relationship between exposure to traumatic events, alcohol abuse and prevalence of posttraumatic stress disorder (PTSD) in two remote Aboriginal communities in Central West region of Western Australia. The specific names of these communities is suppressed to protect their reputation as required in the application to the Western Australian Aboriginal Health Information and Ethics Committee for ethics clearance of the study.

The method of the study is quantitative. Data collection is by means of a semistructured clinical interview and survey questionnaires. The theoretical and philosophical underpinning of the study derives from Pierre Janet's (1925) work on traumatic memory. In this chapter, the author discusses the background and significance of the study, as well as its aims and objectives. The hypotheses of the study are stated and a brief outline of the thesis is provided.

1.2. Background

The author has been fascinated about human suffering and people's capacity to deal with, overcome and survive tragedies of a catastrophic nature, and the skills and ability human beings employ to cope with state-sanctioned violence. Understanding the effect of colonisation on Aboriginal people's health and wellbeing has attracted the interest of many, including health professionals. In spite of Australia's well-funded and advanced health care system, it has been noted that poor health, poor access to education, high unemployment and complex psychosocial health problems exist in the Aboriginal population. These are understood as consequences of colonisation, which exposed indigenous people to a string of traumatic events (discussed in Chapter 2).

During his undergraduate program the author wrote an assignment titled "*Why the Australian health system has failed to improve the Aboriginal people's health*", as a part of a primary health care unit. This provided an opportunity to research some relevant literature (Franklin and White, 1991; Broome, 1982; Byrnes, 1983; Stanner, 1974, 1979). The literature suggests a history of domestic violence, interpersonal violence and government sanctioned systematic violence against Aboriginal people. However, there was no mention of posttraumatic stress disorder (PTSD) or other psychiatric disorders relating to this history of violence. This was attributed to the limitation of the subject and the scope of the paper the author was expected to write.

It was an eye-opening work and soon the author wanted to work in Aboriginal communities with the view of learning more about their culture, way of life and history. Meanwhile he continued reading about Aboriginal people. In the late 1990s an opportunity to work in remote Aboriginal communities in Western Australia arose. In taking up the position, the author lived in Aboriginal communities and socialised with Aboriginal people, and found a quality of gentleness, a willingness to share with and care for others once trust was established. This was in contradiction to some of the literature that described them as “savage,” “primitive” and “uncivilised”, and the way the media portrayed Aboriginal people (Reynolds, 1996a; MacKenzie, 1928). On the other hand, a very high level of alcohol abuse, resultant violence and its sequelae in these communities were evident. The literature indicated a history of trauma and retraumatisation generation after generation (Hunter, 1993a, 1996, 1998a; Atkinson, 1999; O’Shane, 1995; Peters, 1995; Horton, 1994). This raises the question: why are these people engaged in excessive alcohol consumption and carry out violence against each other?

Evidences from literature show disproportionately high prevalence of both traumatic experiences and alcohol abuse in Aboriginal communities (Horton, 1994; Holland, 1992; Hunter, 1993a, 1993b, 1998a; Atkinson, 1991), but fail to indicate causal link. Other studies have reported over-representation of Aboriginal people in police custody and the prison system (Crime Research Centre, 1997, 1999). However, there was no evidence of a systematic research in terms of psychiatric mortality and morbidity in general and prevalence of PTSD in particular.

It goes without saying that there is abundant evidence within the literature that exposure to traumatic events can cause PTSD as well as other psychiatric disorders (Yehuda, 2002; APA, 1994, 2000; WHO, 1992). Following primary exposure to traumatic events (such as violence, rape, threatened death, kidnapping, military combat and natural disasters) and secondary exposure (for example witnessing a traumatic event), PTSD emerges in between 15-30% of individuals (Yehuda, 2002; McFarlane, 1998; Kessler, Sonnega, Bromet, Hughes and Nelson, 1995; Wilson, 1989).

In addition it is well established that victims and survivors of traumatic experiences, and sufferers of PTSD abuse alcohol and other substances (Begic and Jokic-Begic, 2002; Maes, 2000; George and Crystal, 2000). It appears that alcohol and substance abuse are forms of self-medication that serve to control the PTSD symptoms: intrusive thoughts, avoidance and hyperarousal. This in turn contributes to further traumatisation of that person and those around him or her due to the violence associated with alcohol abuse (Begic and Jokic-Begic, 2002; Maes, 2000; Hunter, 1993a). The resultant dependence on alcohol and the development of other disorders related to alcohol abuse are thus major sequelae of the PTSD (McFarlane, 1998). One or more of these secondary consequences may appear to be the principal presenting condition, resulting in misunderstanding and mismanagement of the underlying PTSD. In light of the available literature, this could very well be the case with Aboriginal people.

Due to the absence of research-based evidence, the author felt that there is a need to record the types of traumatic events experienced by

Aboriginal people and its effect on their lives. There is also a need to establish links between exposure to traumatic events, the current epidemic of alcohol abuse and prevalence of PTSD. Finally, the question narrowed down to: is there a relationship between exposure to traumatic events, alcohol abuse and PTSD in Aboriginal communities? As there is no answer to this question in the extant literature, the author concluded that this study should be undertaken.

The study specifically investigates the relationship between exposure to traumatic events, alcohol abuse and prevalence of PTSD. It hypothesises that these are common in Aboriginal communities. It is anticipated that the findings of this study will contribute to the development of prevention and intervention programs that aim to address the complex relationship between these three: exposure to traumatic events, prevalence of PTSD and alcohol abuse in Aboriginal communities. Effective outcomes are likely to require more than strategies that address violence and alcohol consumption in isolation. Thus the need to focus on a broad range of factors that might decrease rates of violence and accidents, and provide effective treatment and rehabilitation programs, with the full involvement of Aboriginal people.

1.3. Significance of the study

Epidemiological approaches provide valuable data in understanding the current problem of alcohol abuse, and predicting the potential sequelae of

this problem in the future. Population studies are a key instrument in health care planning and developing preventative measures.

Although it has been noted that Aboriginal people have been one of the most investigated or researched people on Earth (Horton, 1994), a literature search failed to identify any study that had covered specifically what this thesis is aiming to achieve. This is despite the existence of several research programs, which indicate that Aboriginal people have been exposed to major traumatic events and continue to be traumatised at rates higher than the national average (Hunter, 1998a; Horton, 1994; Atkinson, 1990a, 1990b, 1991). Similarly the rates of alcohol abuse are a matter of considerable concern (Blagg, 1999; Hunter, 1993a). There is sufficient *prima facie* evidence to warrant exploration of the hypothesis that the higher rate of alcohol abuse in Aboriginal communities is strongly linked with exposure to traumatic events and prevalence of PTSD (Hunter, 1996, 1998a; Atkinson and Ober, 1995; Franklin and White, 1991).

1.4. Aims of the study

The broad aims of this study are:

1. To study the relationship between exposure to traumatic events, prevalence of PTSD and alcohol abuse in indigenous Australians;
2. Provide a body of evidence that may be used to increase awareness of social and health policy makers about the prevalence of various types of

traumatic events, the prevalence of PTSD and its relationship to patterns of alcohol abuse and further violence in an Aboriginal community;

3. To contribute to the body of knowledge on these conditions in the field of mental health; and
4. More generally, to contribute to reconciliation from the health professionals' perspective.

1.5. Objectives of the study

The specific objectives of the project are:

1. To study the prevalence of traumatic exposure in remote Aboriginal communities;
2. To study the prevalence of PTSD in these Aboriginal populations;
3. To study the prevalence of alcohol abuse in Aboriginal communities; and
4. To identify possible relationships between exposure to trauma, alcohol abuse and PTSD in this communities.

1.6. Hypotheses

The study poses two sets of interrelated hypotheses, stated as directional hypotheses (not null hypotheses).

A) Hypothesised prevalence:

1. The rate of exposure to traumatic events will be higher in these communities than the national average.

2. The prevalence of PTSD is higher in these communities than the prevalence recorded in the general Australian population.
3. The rate of alcohol abuse in this community is higher than the prevalence recorded in the general Australian population.

B) Hypothesised relationships:

1. There is a positive correlation between exposure to traumatic events, PTSD, alcohol abuse and retraumatisation.
2. Alcohol is used as self-medication to suppress symptoms of PTSD.

These hypotheses will be tested on the assumptions that firstly, there will be an increased risk of alcohol abuse by individuals who were exposed to traumatic events, and secondly, alcohol abuse increases risk of engaging in violent activities. These issues complement each other, where the cycle of violence maintains alcohol abuse and vice-versa.

1.7. An overview of the thesis

The thesis is organised into eight chapters. Chapter Two focuses on the traumatic experiences of Aboriginal people. It reviews the historical background of the traumatic events experienced generally by indigenous people of Australia. It appraises pre-colonial Aboriginal history and moves on to the beginning of European colonisation. The chapter argues that the starting point of the Aboriginal people's problems was the beginning of colonisation. It attempts to cover the major traumatic events experienced by

Aboriginal people throughout the history of colonisation. The chapter also discusses the consequences of these events.

Chapter Three reviews the literature regarding PTSD. It takes a historical perspective on the background of PTSD as a clinically acceptable diagnosis. Two diagnostic systems are compared and the symptoms of PTSD are outlined. Aetiology and risk factors to PTSD are discussed. Ethnocultural aspects of PTSD are also discussed.

Chapter Four focuses on the theoretical and philosophical underpinning of the study. Pierre Janet's theory of traumatic memory and its relevance to the traumatic experience of Aboriginal people is explored. A diagram presenting the author's model of transgenerational trauma is presented.

Chapter Five outlines the methodological approach to the study. Specific approaches – method, instruments, target population, access to target population and sample selection procedures – are described. The reasons for the choice of methodology are discussed. Administration of the instrument, pilot study and ethical implications of the study are summarised. Chapter Six analyses and presents the findings of the study, including the analysis of primary data. This is followed by Chapter Seven, which engages in a critical discussion of the findings. Chapter Eight concludes the thesis with recommendations.

Chapter 2: Aboriginal People's Exposure to Traumatic Events

2.1. Introduction

The focus of this chapter is to review the literature regarding the traumatic experience of Aboriginal people. The review will be divided into three main sections: the historical perspective; the major traumatic events experienced by Aboriginal people; and the consequences of these events. The historical perspective covers pre-colonial society, the beginning of colonisation, Europeans' impressions of Aborigines, and the Aboriginal people's reaction to invading Europeans, the deterioration of race relationships and the escalation of conflict.

Major traumatic events experienced by Aboriginal people include the removal of children from their parents, relocation of families to reserves and missions, massacres and killings, dispossession of land, humiliation and continuing and relentless racism. The third section will review the consequences of exposure to these events. In this section alcohol abuse, family and domestic violence, violence in general, and crime rates will be covered.

2.2. Historical perspective

The British sailor William Dampier reported the existence of Australia in the late 17th century. Captain James Cook confirmed the existence of “the big island” in 1770 (Reynolds, 1996a, 1996b, 1999; Mattingley and Hampton, 1998). The eighteenth century was a difficult time for Britain. The Industrial Revolution had resulted in significant social problems; murderers and many other criminals were packed in to the British prison system for the most petty misdemeanours. Captain Cook reported to the British government the exciting discovery of Australia, and it was quickly proposed to establish a penal colony there. This resulted in the planned colonisation of Australia, which changed the history of Australia’s Aboriginal inhabitants. Before delving deep into the review of literature on colonisation, an historical overview of pre-colonial Aboriginal society is offered below.

2.2.1. Pre-colonial Aboriginal society

While the origin of Aboriginal people is not the focus of this study, it is worthy of mention that some historians believe that Aborigines came to Australia from South East Asia (Franklin and White, 1991; Broome, 1982). Other historians went further by adding that some groups of Aboriginal people might have migrated from Africa. It is likely that they crossed from other parts of the world before the sea level rose. Historical records show that low sea levels were experienced about 20,000 to 120,000 years ago (Franklin and

White, 1991; Broome, 1982). There is no doubt, however, that Aborigines occupied this country for tens of thousands of years ahead of the Europeans. The discovery of 30,000 year old human remains at Lake Mungo in NSW and 45,000 year old bones at Keilor near Melbourne indicate that Aborigines occupied Australia for at least 50,000 years (Broome, 1982). The discovery of charcoal at Lake George with an estimated date of 100,000 years pushes this estimation back even further (Broome, 1982).

As there was no written account of Aboriginal history of pre-settlement society, European explorers, the first settlers, and historians' interpretation of information provided by Aboriginal elders were used to describe Australia's pre-colonial history. While there were many different cultural and linguistic groups that comprised the Aboriginal population of Australia, there were also some general features that applied throughout. In Aboriginal society elders were sources of history, passing information to younger members of the community by means of story telling. As Europeans did not have full exposure to Aboriginal elders due to a lack of trust and communication problems, the historical documents composed by non-Aboriginal writers do not contain a complete account of the Aboriginal people's life and history. It may also be an account of personal interpretation and reaction to previously unknown people and their way of life. The information presented in this section is based on those accounts and may not represent the pre-colonial history of Aboriginal society in its entirety, but it covers issues relevant to this study.

The Aranda people of Central Australia believed that sometime in the far distant past, ancestral beings who were at the same time human and animal, crossed through the surface of the Earth, which was lifeless (Broome, 1982). They believed that these great ancestors breathed life into them and their surrounding environment. Another group of Aboriginals, the Arnhem Land people, believed that their life began when the Djanggawul sisters and their brother came across the sea carrying their sacred mat and dilly-bag from which life was born (Broome, 1982). These belief systems, which were slightly different just in these two groups, inform us that there were great variations in this creation theme in over 500 tribes and dialects when Europeans first arrived in 1788 (Broome, 1982). They also inform us that there are strong bonds within these different groups that gave them one identity - Aboriginal. Broome (1982, 21) summarised the bonding as follows:

The 500 separate traditional communities in which the Aborigines lived for over 2000 generations were small scale societies in which everyone knew everyone else. Each group was marked by a strong solidarity based on kinship ties which provided security and intimacy. Each Aboriginal community was held together not by the economic usefulness of the members to each other as in our society, but because all the individuals in the group shared the same world view and meanings about what life should be. These social features, the Aborigines' intimate relationship with nature, and their non-materialistic philosophy, made it truly an admirable culture.

Although influenced by a materialistic worldview and the economic rationalist philosophy and policy of mainstream Australian society, Aboriginal society still holds to this belief system. While the above is a brief overview of the Aboriginal society in pre-colonial Australia, what was their health status?

2.2.2. Aboriginal people's health in pre-colonial Australia

While volumes have been written about Aborigines since colonisation, information about their pre-colonial society remains limited and inconclusive. Especially relevant to this study is their health status in pre-colonial Australia. Due to absence of a written account of population profile data before colonisation, information about Aboriginal people's health in their long history of occupation of this continent is unclear. European historians documented information obtained in early encounters and interpreted the Aborigines to be very fit at the time of initial contact and in the early years of colonisation (Franklin and White, 1991; Swan, 1992; Reid and Trompf, 1991; Broome, 1982).

In pre-colonial Australia, the Aboriginal people's economy was based on hunting and gathering. Franklin and White (1991, 3) state, "At the time of the arrival of the first fleet, the Aboriginal people have developed an economy, based on gathering and hunting and a technology and way of life finely tuned to their environment". When Europeans colonised Australia, Aboriginal people lived in numerous small tribes in hunter-gatherer societies and occupied designated territories. They appeared to be healthier than the Europeans at the time (Franklin and White, 1991; Swan, 1992; Broome, 1982; Stone, 1974).

Through their chosen lifestyle and harmonious manipulation of their environment, they were healthy, their food was nutritional and they did not have kind of health problems they have today. Although William Dampier's

assessment was negative (see 2.2.4.1), James Cook's summary implied that the Aboriginal people had a better mental health status than Europeans at the time (Stone, 1974). According to Stone (1974, 15) Captain Cook noted that "...they are far more happier than we Europeans, being wholly unacquainted not only with the superfluous, but with the necessary conveniences so much sought after in Europe". Others also suggested that they were physically, socially and emotionally healthier than most Europeans of the time (Reynolds, 1999; Winch, 1989; Franklin and White, 1991; Thomson, 1990, 1991).

2.2.3. Aboriginal population

The first consequence of colonisation was decline in the Aboriginal population. It is widely accepted that the Aboriginal population dramatically decreased between the 1770s and 1950s. While there is no accurate figure, the Aboriginal population was estimated as ranging from 250,000 to 1,000,000 in 1788 (Franklin and White, 1991), though some historians have argued that the figure was higher. Based on an estimated population of 250,000 to 1,000,000 in the immediate pre-colonial era, if annual population growth was only 2%, by the year 2000 the Aboriginal population would have been 20,285,000 to 81,147,000. The 1996 report of the Australian Bureau of Statistics report shows that the Aboriginal population was 314,120 (ABS, 1996). Now, Aborigines are one of the fastest growing sections of Australia population (ABS, 1998).

There are many factors believed to be responsible for population decline. They include massacres and killings, confining Aboriginal people to missions and reserves, removing children from their parents, dispossession of land, introduction of previously unknown diseases coupled with a lack of immunity and in adequate treatment for those diseases, and changes in diet (Clarke, Harnett, Atkinson and Shochet, 1999; Hunter, 1998a; Franklin and White, 1991; Binn, 1945). Those events contributed not only to population decline, but also to a poor mental health outcome for those who survived.

The rapid decline of the Aboriginal population led the Federal Government by the 1930s to assume that Aboriginal people would die out (Reynolds, 1999; Horton, 1994; Franklin and White, 1991). A statement at a Federal Ministers' meeting in 1937 concluded that "as the uncivilised full bloods [sic] were dying out, all that was needed to be done was to establish a few inviolable reserves" (Franklin and White, 1991, 18). These are some of the core issues faced by Aboriginal people as a result of colonisation. A brief review of the beginning of colonisation would provide a clear understanding of the Aboriginal people's experience.

2.2.4. Beginning of colonisation

What is colonisation? How did it start in Australia? What was the Aboriginal people's response? Colonisation is the action of controlling political, economic, social and military power of another country by a military force to exploit its natural resources and human potential. Very often,

colonisers have attempted to destroy the culture, values and beliefs, as well as the socio-economic and socio-political system of the colonised people and replace it with their own. Winch (1989, 53) emphasises that "colonisation is exploitation of people and resources". While this is its direct aim, it destroys a people's way of life, disempowers them, and takes away their dignity, self-esteem, self-confidence, self-respect, and human and socio-economic productivity. The impact of these losses on the psychosocial health of nations subjected to colonisation is enormous. Aboriginal people are one of many groups of people who suffered at the hands of colonisers.

In May 1787 a British fleet sailed for Port Jackson, now Sydney, with over a thousand people including convicts, sailors, officers and other members, led by Captain Arthur Phillip. They arrived on January 26th 1788, to establish what was claimed to be a "self-supporting prison" (Reynolds, 1996a, 1996b, 1999; O'Donoghue, 1993; Franklin and White, 1991; Broome, 1982). Under the British system, the continent was not inhabited and the land was declared *terra nulla*. The rationale for this was that there were no permanent buildings and no agricultural industries. When the Europeans arrived in 1788, Aboriginal people did not have a national leader who could organise a defence force and provide political and military leadership. At the beginning, the British colonial force encountered little or no armed resistance by Aboriginal people. In fact Aboriginal people treated them as guests for the first few months. Convicts, settlers and the accompanying armed forces encountered minimal challenge in taking control of Aboriginal people.

What was the impression that these vastly contrasting groups of people made on each other? This question needs to be broken down into two sections. What was the European impression of Aboriginal people? What was Aboriginal peoples' impression of the Europeans on their arrival? An overview of the European impression of Aboriginal people is provided below.

2.2.4.1. European impressions of the Aboriginal people

The impressions of two famous European explorers shaped the subsequent policy development and official approach of colonial authorities to Aboriginal people. Those views also shaped the political landscape in terms of the white-black relationship in this country. William Dampier had described Aboriginal people as follows:

The inhabitants of this country are the miserablest people in the world ... [they] have no houses and skin garments, no sheep, poultry, and Fruits of the Earth, ostrich Eggs etc... and setting aside the Human Shapes they differ but little from the Brutes ... they have no clothes ... their only food is a kind of fish...(Stone, 1974, 15).

This damning and dehumanising assessment and interpretation of a society with a distinct culture and a way of life set the tone for discriminatory policies of successive authorities and shaped public attitudes towards Aborigines. No doubt, for Aborigines this statement, which labelled them as sub-humans in the scale of species, was humiliating (Reynolds, 1996a; Broome, 1982; Stone, 1974).

In describing the communication difficulty experienced when he encountered Aboriginal people, Dampier further stated, "...all the signs we

could make were to no purpose, for they stood like Statues, with no motion but grinned like so many monkeys, staring one upon the other..." (Stone, 1974, 15). Such views may have led Europeans to use pseudo-scientific justification for the subsequent ill treatment of Aboriginal people over the past two centuries (Reynolds, 1996a, 1996b, 1999). For the generations that followed, the white-black relationship was marked by prejudice and injustice, and was largely influenced by the beliefs of Dampier and others like him. The medical profession had articulated similar beliefs, in many publications of the *Australian Journal of Medicine* until the early 1950s (Franklin and White, 1991; MacKenzie, 1928).

In contrast to those views, what appears to be a fair and pragmatic assessment of Aboriginal people also started with the beginning of colonisation. This school of thought appears to have followed Captain James Cook's impression of Aboriginal people. Unlike Dampier, Captain Cook described Aboriginal people more sympathetically:

I have seen of the Natives of New Holland, they may appear to some to be the most wretched People upon Earth; ... [but] they live in a tranquility which is not disturbed by the inequality of condition. The Earth and sea of their own accord furnishes them with all things necessary for life ... they live in a warm and fine climate, and enjoy every wholesome air (Stone, 1974, 15).

Captain Cook's description of the Aboriginal people, their way of life and culture was in a huge contrast to William Dampier's views.

Throughout the history of white and black Australians, it appears that the above two first impressions of Europeans formed a parallel ideological line. On the one hand, those who believed in their elimination tried to support the ill treatment of Aborigines using Charles Darwin's theory of evolution; and

on the other hand those who agreed on dispossessing and controlling the Aboriginal people took a moderate stance in terms of how to treat them. These views clearly emerged at an early stage of the colony and continued throughout its history. While the Europeans drew their own opinions on Aboriginal people, what was the Aboriginal people's reaction towards the Europeans?

2.2.4.2. Aboriginal people's reaction to the invaders

Aboriginal people did not know that they would experience unprecedented violence, not only within the life span of that generation, but also for many generations to come. Not knowing that the Europeans were coming to occupy their land permanently, Aboriginal people offered a great deal of hospitality, beyond the expectation of the colonisers themselves. Governor Arthur Phillip, commander of the First Fleet was "impressed by the behaviour of the Aborigines who greeted the ships" (Stone, 1974,17). The initial positive reaction of the Aboriginal people towards their invaders continued across the continent, suggesting that generally speaking, they were friendly and gentle. According to Stone (1974, 17), "Those who contacted tribesmen in the interior [part of the continent] continued to be impressed by their [Aboriginal people's] generosity and intelligence".

Europeans who had little knowledge of the continent exploited the friendly and gentlemanly manner of the Aboriginal people. Aborigines helped them discover grazing and farming land and helped them with hunting and

fishing. Documents written by Governor Phillip indicate that despite being anxious about those "strange people", Aborigines remained friendly during the first few months (Stone, 1974). However, this friendly relationship did not last long. The deterioration of the white-black relationship and beginning of the conflicts will be discussed in the following section.

2.2.4.3. Deterioration of white - black relationship and start of conflicts

The tranquillity and relaxed environment of the Aborigines faced unprecedented attacks that started to cause discomfort to the original inhabitants (Stone, 1974; Mattingley and Hampton, 1998; Rosewarne, 1976). As there was no sign of the "guests" leaving and not knowing what was happening, Aboriginal people increasingly became anxious about their "visitors". According to Stone (1974, 17), "As it became apparent that the settlement was permanent, that bush was being cleared, native animals were being dispersed, and fish was caught, misunderstandings and anxiety between the two races grew". Once they understood that the Europeans were not going away, Aboriginal people started resisting occupation of their land. On the other hand, already suspicious convicts and settlers started feeling insecure and responded with violent provocation to Aboriginal people's discomfort (Reynolds, 1996a, 1996b, 1999; Horton, 1994; Stanner, 1979; Stone, 1974). This was against the instructions given to Governor Phillip by the British government.

Governor Phillip was instructed to treat Aboriginal people with civility and respect. The instruction to Governor Phillip states:

You are to endeavour by every possible means to open an intercourse with the natives, and to conciliate their affections, enjoining all our subjects to live in amity and kindness with them. And if any of our subjects shall wantonly destroy them, or give them any unnecessary interruption in the exercise of their several occupations, it is our will and pleasure that you do cause such offenders to be brought to punishment according to the degree of the offence. You will endeavour to procure an account of the numbers inhabiting the neighbourhood of the intended settlement, and to report your opinion to our secretaries of the state in what manner our intercourse with the people may be turned to the advantage of this colony (Stone, 1974, 19).

Having enjoyed being treated as a guest, Phillip was pleased with Aboriginal people and reaffirmed his commitment to the non-violent approach. His response to the British government was, "With respect to the natives, it was my determination from my first landing that nothing less than the most absolute necessity should ever make me fire upon them, and tho' preserving in this resolution has at times been rather difficult, I have hitherto been so fortunate that it never has been necessary" (Stone, 1974, 19).

The above statement clearly suggests that the British government's instruction to Governor Phillip was based on the condition that if Aboriginal people accepted the colonisation of their land and associated losses without resistance, he would treat them fairly. However, he was free to shoot them if they resisted. This view was unrealistic, as no human group ever accepts the invasion of its territory. Phillip's response exposed the actual content and underlying principles of the instruction he was given by George III's government.

On another front, the conflicts between Aborigines and European invaders took the shape of open warfare (Stone, 1974). Despite the

increasing conflicts, Governor Phillip continued to hold a somewhat moderate view. However, after losing his own personnel in skirmishes with Aborigines, and also owing to increasing pressure from the settlers and convicts, and having located rivers, grazing lands and access to important parts of the country, Phillip felt that their friendship was not important for the settlement's survival. He lost sympathy for them and instructed "ten natives caught to be beheaded" (Stone, 1974). This was a turning point in the history of black-white relations. However, some groups of Aborigines still remained friendly with settlers and Governor Phillip contended that Aboriginal people were friendly and trusting (Stone, 1974).

2.3. Major traumatic events experienced by Aboriginal Australians

Traumatic events confront people with both an external and internal reality which attack ideals and beliefs about safety and personal control. The external reality is of danger and uncontrollable events that may kill, maim, brutalise or destroy. Disaster, war, rape, assault, motor vehicle accidents and predatory violence also generate an internal reality of fear, horror and helplessness. The person is often affected more by the harrowing memories than the event itself. This leads to a sense of recurrent trauma, triggered by even the most subtle of stimuli (McFarlane and Raphael, 2001, 149).

The history of Aboriginal people is one of violence and horror. Aboriginal people have been exposed to numerous traumatic events since the beginning of colonisation and continue to be alienated. The major traumatic events experienced by Aboriginal people include "massacres, dispossession of land, relocation of individuals and families to missions, forced removal of children from their family into white families, institutions and unrelenting

racism” (Clarke et al., 1999, 6; White and Franklin, 1991, 5). Hunter (1998a), Peters (1995), O’Shane (1995), Franklin and White (1991), Broome (1982) and Stone (1974) hold similar views.

Once the initial trauma had taken place, attempts by successive governments to undo what was done resulted in further retraumatisation. The major traumatic events were state-sanctioned and misinterpreted by the state either out of a genuine lack of knowledge or a deliberate attempt to deny responsibility. In either case this results in a misunderstanding of the issue by the wider society.

The Aboriginal people’s health and wellbeing seemed to have been crippled first by the colonial authorities and later by Federal and State government policies for over two centuries. There is sufficient evidence to suggest that the current Aboriginal generation is suffering from a combination of the effects of the traumatic events experienced by past generations and those of its own. This process has resulted in what is proposed in this study as “transgenerational trauma”. Massacres and killings are one of the most traumatic experiences, and will be discussed below.

2.3.1. Massacres and killings

Aboriginal culture... is a history of brutality and bloodshed. The assault on Aboriginal people includes massacres, diseases, dispossession and dispersal from the land. Aboriginal people were not only dispossessed of the land, but also much of the traditional culture and language was taken from them. For many years, in many parts of Australia, Aboriginal people were herded onto reserves and missions (O’Donoghue, 1993, 14).

As reported earlier in this chapter in section 2.2, it has been well documented by historians that the reaction of Aboriginal people to their encounter with Europeans was friendly. The relationship between the two races quickly degenerated into hostility and confrontation. As Europeans settled on the land, Aboriginal people were restricted in their right of movement for hunting and gathering (Franklin and White, 1991; Clark, 1989) with severe physical and psychological consequences.

Authorities subjected Aboriginal people to massacres in an attempt to eliminate rebellion and failed to protect them from the brutality of settlers (Reynolds, 1996a, 1996b, 1999; Mattingley and Hampton, 1998; Horton, 1994; Franklin and White, 1991; Broome, 1982). The colonial system turned a blind eye to harsh and punitive measures taken by settlers against Aboriginal people (Reynolds, 1996a; 1999). Broome (1982, 30) cites a European's statement in 1835: "I have heard again and again people say they [Aborigines] were nothing better than dogs and that it was no more harm to shoot them than it would be to shoot a dog". This statement suggests that brutalities towards Aboriginal people were meant not just to control them, but also served as leisure activities. Picture 1 illustrates the manner in which attacks against Aboriginal people were carried out.

Picture 1: Attack against Aboriginal family.



Source: Mattingley and Hampton, 1998.

The above picture illustrates settlers preparing to attack Aboriginal families in the camp. Henry Reynolds reported a letter that appeared in a local newspaper in Queensland in 1867:

The first surmise was that it was some early kangaroo hunter, but the crack was too sharp for that, and the number of discharges too numerous to allow of such a supposition bearing a second thought, and a rush in the direction of the camp was immediately made by those who were so early a-foot, where a scene presented itself alike brutal on the part of the perpetrators, and revolting to the feelings of those who saw it. The native camp was deserted, but around the fires nearest to the township lay the scanty garments of men, gins and piccaninnies, and many of them saturated with blood, while the track of the fugitives could be easily traced by the trail of blood leading from the fires in every direction. At the fire nearest the Creek, which separates the camp from the township, and around which a number of blacks apparently had been sleeping, two pools of blood and brains showed where foul murder had been perpetrated, and a gin's clothing, all stained with blood, was also exactly as if the unfortunate black had just left the articles on finding herself wounded. A little further on, close to the fire, where one person, probably an old man, had passed the night, another puddle of blood and brains was found, the surrounding ground bore all the traces of the flights of wounded men, and of dead bleeding bodies having been dragged over it (Reynolds, 1999, 105).

Unlike other developing countries colonised by European powers, the absence of organised military resistance by Aboriginal people led the British forces, convicts and settlers to believe in elimination instead of "control and exploit" (Clarke et al., 1999; Franklin and White, 1991; Stone, 1974). When there is armed resistance, there is a degree of loss on both sides and as a result both sides experience trauma. In the case of Aboriginal Australians versus Europeans, the burden of loss and trauma lay on the Aboriginal people alone (Hunter, 1998a). This makes the impact of trauma worse. It becomes even worst when a traumatic event is designed, planned and systematically executed to cause maximum damage. One of the most effective means of maintaining trauma was the herding of Aboriginal people onto missions and reserves with escapees being killed (Clarke et al., 1999;

O'Shane, 1995; Franklin and White, 1991; Broome, 1982). The process of colonisation is aimed to induce serious physical, psychological, emotional, political, economic and cultural consequences on the people subjected.

Some aspects of Australian settlement were equivalent to what are now being regarded as 'crimes against humanity', 'genocide' and 'ethnic cleansing' (Hunter, 1996; O'Shane, 1995; Peters, 1995). They breached various international charters, conventions, declarations and United Nations rulings, most of which Australia was signatory to. In one report survivors provided graphic details of massacre:

People were camped by the billabong at Burarr. After breakfast, the men on horseback went off through the camp and started collecting the spears and breaking everyone. They kept breaking them, on and on, until one man said, 'hey, why are you breaking our spears? What are you up to? What are you going to do to us?' So one man turned round and picked up the rifle and he hit with the rifle butt on the forehead. The man who was hit by the gun was my [Birrikiti's] gathu [nephew], Pangaypangay. He dropped to the ground. His children were shocked to see their father fall down. They cried out, 'our father's down!' So everyone turned round and ran for their spears. Before they could reach them, the other men tried to shoot them with guns so they didn't have a chance to get them. The second one down was Gudaltji, whom I call mari [grandfather]. Then, my other mari called Birrkuda, was the third down. Wangarrwiryuna was the fourth down (he was mari too). Then they turned and shot my ngapipi (mother's brother), Mirringini. After Mirringini, they shot Djewiny, then Wuliwuli, my mukul (aunt), who was a Gumatj woman. They threw them all in the water. They killed almost everyone in the camp. The women and children were frightened, and some of them ran and hid in the big thick jungle of Rupawiliya. One man escaped: he dived into the water and stayed under. When he came up for air, they'd shoot, and he'd go down again. He finally came up in a cave at the side of the creek where he was safe. Djulama was taken away...They got one other lady from Burarr, where they shot everyone, and took her too, and her name was Bunuthul, my mukul. And they took another woman, too, from the Djambarrpuyngu clan, and [the white man] took her, too; she's a sister of my galay (cousin), Barpar. He got three women and took them away... From Roper, through all those [named] places to Biranybirany and other places, and shot all these Yolngu and from Biranybirany back to Bal, and then he came back to Banggawupa, shooting people, not visiting. At Banggawupa, that's where he wiped out everybody. Nobody wanted to go back there (Franklin and White, 1991, 4).

In this manner, people were hunted and killed. For those women who were abducted the possibility of being subjected to physical abuse, sexual exploitation and slavery was high. The above-mentioned survivor's last words, "Nobody wanted to go back there" are a clear indication of a severe traumatising and one of the main symptoms of PTSD, suggesting that the survivors attempted to avoid an external cue that symbolised the traumatic event.

There were a number of massacres reported almost in every colony. The Risdon massacre of Tasmania took place in May 1804, which was one of several in the colony (Ellis, 1981; Horton, 1994). While there was no accurate figure provided, it is estimated that 50 people were killed (Horton, 1994). Another incident was the Cape Grim Massacre, which took place in 1827 and a total of 30 men, women and children were killed (Reynolds, 1996a; Horton, 1994; Mulvaney, 1969).

In the Northern Territory, several massacres and sporadic killings were carried out over many decades. One of the most well known was the Coniston massacre in 1928 in which 17 Aborigines were killed when attending a traditional ceremony (Michaels and Kelly, 1984). Queensland was well known for its campaign of terror, humiliation, massacres and sporadic killings. One of the earlier massacres was the Cullinlaringgo Massacre, which happened in October 1861, and resulted in the deaths of 70 Aboriginal people. Another massacre in Queensland was the Battle of Camp on 3rd September 1873 (Holthouse, 1967). The Hornet Bank Massacre, which

represents a series of massacres, was carried out by pastoralists from 1853 to 1858 (Elder, 1988; Franklin and White, 1991; Stone, 1974).

In Victoria two major massacres were recorded as occurring in February and March 1840, both involving the Konongwooting Gunditj clan and known as the Fighting Hills Massacre and Fighting Waterholes Massacre (Clark, 1990). In the first incident, an estimated 80 people were killed. In the latter the number of deaths was not known, but it was reported that a group of old men, women and children were slaughtered.

In Western Australia, the Battle of Pinjarra was one of several major conflicts and claimed the lives of up to 80 Aborigines (Green, 1984). Another major incident was the Forrest River Massacre, which took place in May 1926. This one represented the state's worst slaughter of Aboriginal people. It followed an incident where a settler on horseback lashed an elderly Aboriginal man 30 times. The elderly Aboriginal man speared and killed the settler. As a result this elderly man and up to 30 other Aborigines were all arrested and chained. Ten of those were shot in police custody (Wood, 1927). Another massacre that resulted in the death of almost an entire clan was Convincing Ground Massacre, which took place in Portland around 1833/34 (Clark, 1988, 1990).

In New South Wales, several massacres took place. One of those was the Myall Creek Massacre, which occurred in 1838 and resulted in the killing of 28 Aborigines, mainly women and children (Atkinson and Aveling, 1988; Horton, 1994). The figures reported in this section are merely the tip of the iceberg on a scale indicating hugely significant loss of lives.

2.3.2. Forcible removal of Aboriginal children

H. Meyer, a German missionary, was impressed with way in which the Aborigines treated their children, who were 'brought up with great care, more than generally to the lot of children of the poor class of European'. He observed in 1946 that when a child cried it is passed from one person to another and caressed and soothed, and the father will frequently nurse it for several hours together (Reynolds, 1996a, 100).

The above quoted parenting quality did not matter; Aboriginal parents were regarded as not fit to care for their children. This resulted in the forcible removal of children for 'their own good' (Biles, McDonald and Fleming, 1989; Reser, 1989; Kennedy, 2000). Forcible removal of children was one of the most distressing of all traumatic events experienced by Aboriginal people. This had multiple impacts not only on the direct victims, but also on the entire Aboriginal society. It was official government policy that resulted in the so-called stolen generation:

Until very recently, Aboriginal children were taken away from their mothers, placed in institutions and in some States used as cheap labour. I cannot overstate the traumatic consequences of policy and the destruction of Aboriginal and community life that resulted. It seems incredible now, but it was the policy of successive governments to destroy Aboriginal family life under the banner of assimilation (O'Donoghue, 1993, 14).

Forcible removal of Aboriginal children from their parents had devastating multiple impacts on Aboriginal people's culture, future generations' health and wellbeing and most importantly on the lives of the direct victims. It is also one of the most politicised traumatic events alongside the dispossession of land.

According to O'Shane (1995) the removal of Aboriginal children began in 1813 when Governor Hunter of NSW took away six boys and six girls. The

state mandated abduction of Aboriginal children and the systematic disruption of indigenous family life has continued until very recently. This was despite Australia being a signatory to the United Nations Convention on Genocide (1948), in which genocide is defined to include forcibly transferring children of one group to another group (Hunter, 1998a; Human Rights and Equal Opportunity Commission, 1997; Peters, 1995; O'Shane, 1995).

Aboriginal children were taken away from their parents by "reason of their race, Aboriginal families were considered to be incompetent parents, neglectful to their children, from whom the children had to be removed if they were to be worthwhile adults" (O'Shane, 1995, 26). Consequently, they lost traditional family values and morals, which resulted in a massive exposure to psychosocial health problems (Franklin and White, 1991; Thomson, 1991; Stone, 1974). The Human Rights and Equal Opportunity Commission (1997, 37) concluded that "between one in three [to] one in ten indigenous children were forcibly removed from their families and communities in the period approximately 1910 to 1970". The consequences of those events are multiple and have a generational impact. Parents of those children taken away become traumatised as a result of the actual removal and re-traumatised when denied access to their children. The children, who were taken away, also suffered from loss of an important bonding for psychological development and sense of security.

The children were brainwashed – told that they were there because their parents did not want them, did not care for them, their fellow Aboriginals out there were bad people and their culture was not good either – not to go

back to their home and think of their parents. The acceptable way was to behave and to dress like white people (O'Shane, 1995; Peters, 1995). Once the brainwashing process was completed, by the age of 15, children were effectively denied their Aboriginality, and then they were distributed for domestic work and at times sexual exploitation (Hunter, 1998a; O'Shane, 1995; Peters, 1995). One victim revealed to the National Inquiry on the Stolen Generation:

I remember when my sister come down and visited me and I was reaching out. There was no-one there. I was just reaching out and I could see her standing there and I couldn't tell her that I'd been raped. And I never told anyone for years and years. And I've had this all inside me for years and years and years and years. I've [been] sexually abused, harassed, and then finally raped, y'know, and I've never had anyone to talk to about it ... nobody, no father, no mother, no-one. We had no-one to guide us. I felt so isolated, alienated. And I just had no-one. That's why I hit the booze. None of that family bonding, nurturing – nothing. We had nothing. Human Rights and Equal Opportunity Commission (1997, 138).

Another victim described the brainwashing process of a stolen child:

“we were told that the only proper way was to dress and act like white people. Once we were removed, we were not allowed contact with our families, if they came looking for us, they were told we were not there” (Peters, 1995, 17).

Another survivor described forcible removal: “We still had our place there. We were only on loan to the government for an experiment that went horribly wrong – the experiment being genocide” (Peters, 1995, 19).

Children were subjected to physical abuse and unpaid labour. It was reported that: “when anybody come to pick up a worker they used to line us up and they'd make you flex your muscles. If were big and strong they'd pick you – like a slave market. I was sent out at [age of] 11. I worked there for seven and a half years, never got paid anything, all that time. We used to

bring the cattle in ... we didn't get nothing" (Human Rights and Equal Opportunity Commission, 1997, 83). Physical abuse was common. One victim revealed to the inquiry into the stolen generation: "I've seen girls naked, strapped to chairs and whipped. We've all been through the locking up period, locked in dark rooms. I had a problem of fainting when I was growing up and I got belted every time I fainted... I have seen my sister dragged by the hair into those block rooms and belted because she's trying to protect me... How could this be for my own good? Please tell me" (Human Rights and Equal Opportunity Commission, 1997, 119). The victim's question remains unanswered.

The impact of this on the direct victims and their children was enormous and left permanent psychological scars on those who were taken away. It has also affected the wider Aboriginal community with far-reaching consequences for generations to come. This is a leading cause of PTSD, other psychiatric disorders, alcohol abuse and related legal, social and health problems.

One survivor described the consequences of being a stolen child: "...all I focused on was looking after my children. You see the word welfare was still indented in my brain, and I made a pact with myself that nobody was going to take my children away" (Peters, 1995, 17). This hypervigilance and avoidance seems to be an indication of the level of psychological damage sustained by Aboriginal people as a result of being a stolen child or having lost a child to the authorities. Continued fear, feeling as if the event is recurring, intrusive thoughts and preoccupation with the traumatic event are

symptoms of PTSD (DSM-IV and ICD-10). As these symptoms have not been given due attention or misinterpreted by health professionals, which has resulted in only limited positive intervention, Aboriginal people continued to use self-medication to control their feelings.

2.3.3. Dispossession of land

The problems confronting us is that of two very different cultures ...for Aborigines the meaning of life is based on their relationship to the land ...for white people land is generally seen as a means of livelihood to be developed and appropriated for economic gains...for Aborigines (this is) continuous theft of their livelihood, their health... all that is sacred to them (Kidd, 1998, 2).

Alongside the removal of children, dispossession of land also resulted in severe psychological and cultural disruption, and remains one of the major traumatic events affecting Aboriginal people. Dispossession of land also removed the resilience factors necessary to deal with other traumatic events. As Aboriginal people have attached a special meaning to land, its loss has multiple effects. Pointing to these effects from a contemporary economic point of view, O'Donoghue (1993) stated:

The loss of the land has meant the destruction of the Aboriginal economy, the result of which has been poverty and a dependency on handouts and welfare (O'Donoghue, 1993, 14).

One of the most traumatic experiences that have been engraved in the memory of every Aboriginal person is the dispossession of land. Aboriginal people have formed a very strong and unique attachment to land, linking it to their religion, culture and way of life. Dispossession of land amounted to an

attack on their fundamental social fabric, religious beliefs and way of life and removed one of the core resilience factors. The basis for dispossession was Aboriginal people's lifestyle. The total isolation of the continent, the unsuitable plant and animal life and Aboriginal people's customs and lifestyle at the time did not allow farming to develop, and hence there was no need to build tenements of any permanence. This gave the Europeans an excuse to claim that prior to their arrival humans did not inhabit Australia.

In contrast, Aboriginal tribes claimed defined geographic areas and attached significance to land, linking it to Dreamtime mythology. To the Europeans, the absence of human dwellings meant total non-attachment of Aboriginal people to land. With the European advance to the interior part of Australia and consequently taking possession of more land, Aboriginal people were displaced from their tribal homes or designated territories and herded onto reserves and missions (Franklin and White, 1991; Hunter, 1996, 1998a; O'Donoghue, 1993). Dispossession of land also contributed to other disasters, such as loss of independence and economic resources.

When Aboriginal land was used for various purposes including atom bomb tests, there is no evidence suggesting that Aboriginal people's safety was taken into account. Aborigines were powerless to prevent the environmental damage to their sacred land, but were also exposed to dangerous health hazards. Picture 2 shows a nuclear bomb test in the 1950s on the land that was once populated by Aborigines.

Picture 2: Nuclear test in the 1950s.



Source: Mattingley and Hampton, 1998.

For Aboriginal people, land is not only an economic resource; it is also specifically linked to health (Franklin and White, 1991; Johnson, 1992). Therefore, “land right” is a right to health (Johnson, 1992). This makes the

loss of land a leading traumatic event and a contributing factor to several other health problems. Franklin and White (1991, 7) argue “although they [Aborigines] might have moved camp often each group hunted and gathered within a set area, usually returning to a particular place at the same season each year”. The Europeans saw land as a resource to be explored and exploited. In contrast, Aboriginal people have a special attachment to their land (Stanner, 1979). They love it, respect it, they care for it and it is a source of their life and spiritual belief. In describing their attachment to land, Stanner summarised:

No English words are good enough to give a sense of the links between an Aboriginal group and its homeland. Our ‘home’, warm and suggestive though it be, does not match the Aboriginal word that may mean ‘camp’, ‘hearth’, ‘country’, ‘everlasting home’, ‘totem place’, ‘life source’, ‘spirit centre’ and much else all in one. Our word ‘land’ is too sparse and meager. We can now scarcely use it except with economic overtones unless we happen to be poets. The Aboriginal would speak of ‘earth’ and use the word in a richly symbolic way to mean his ‘shoulder’ or his ‘side’. I have seen an Aboriginal embrace the earth he walked on. To put words ‘home’ and ‘land’ together in ‘homeland’ is a little better but not much. A different tradition leaves us tongueless and earless toward this other world of meaning and significance (Stanner, 1979, 230).

Since the High Court decision on Mabo and subsequent native titles cases, the term ‘land’ as used by politicians is still compounded with political and economic factors. In contrast, when Aboriginal people talk about land rights, they mean right to life, right to have a spiritual belief, a right to better health, etc.

Its loss means a dramatic change in diet, resulting in poor health outcomes. Hence they attach significant meaning to land; the extent of trauma associated with its loss is enormous, deeply ingrained and can

contribute to widespread psychological disorders including PTSD. It is the meaning, which the Aboriginal people attached to land that makes its loss traumatic. Dispossession of land thus played an important role in the destruction of Aboriginal culture.

2.3.4. Destruction of culture

Aboriginal culture has been subjected to the most profound shocks and changes. It is a history of brutality and bloodshed (O'Donoghue, 1993, 14).

Systematic destruction of Aboriginal culture took place as a consequence of institutionalisation of Aboriginal people, dispossession of land and forcible removal of Aboriginal children from their parents. The process included negative propaganda about Aboriginal culture and brainwashing of children that their culture was inferior and they should act like white people (Hunter, 1998a; Peters, 1995; O'Shane, 1995; O'Donoghue, 1993).

Aboriginal culture has remained relatively intact only in some outback-remote communities. One of the survivors of the stolen generation described her feelings: "I am sad and angry thinking how they robbed me of my years with my family. Why, they called us savage. I have found out that my people are a gentle race, so why?" (Peters, 1995, 18). Aboriginal people's culture in most major cities and towns is distorted and those who are trying to maintain it are facing an enormous challenge. This challenge is a product of historical factors that have impacted on Aboriginal people's values, beliefs, culture and way of life.

Destruction of culture was done through violence. Dislocation of Aboriginal families onto reserves, restriction of movement and forcible removal of children from their parents and teaching them how bad their Aboriginality was (Hunter, 1998a, 1998b; Franklin and White, 1991; Stone, 1974). These and other attacks on Aboriginal culture resulted in loss of identity, loss of pride in the community as a societal entity and poor health (Franklin and White, 1991; Stone, 1974; Peters, 1995; O'Shane, 1995). Today, the effects of these are evident in the daily lives of significant section of Aboriginal population. The outcome, especially for those who went through the stolen generation process and their children, is being trapped between two opposing cultures. A society without culture is a soldier without a gun in the middle of a battlefield.

2.3.5. Terror and humiliation

Franklin and White (1991, 9) report that: "The government policies from the 1790s, and conditions on the Australian frontier, had conspired to arm the settlers and encouraged them to engage in innumerable petty, private wars with the Aborigines". Reynolds (1996a, 1996b, 1999) also reports widespread frontier violence against Aboriginal men, women and children. Once the land was controlled and those Aboriginals engaged in guerrilla warfare were wiped out, the colonists used terror and humiliation to brutally exploit the remaining Aboriginal people. Franklin and White (1991, 8) reported a South Australian police constable's statement in 1891: "No matter

what it is, these poor creatures have to submit to, ...it is simply through fear

...it is the one word fear all through". It was further reported that:

Police occasionally arrested 'town blacks', marched them a mile or two down the road and shot them... In April 1861 Sub-Lieutenant Bligh led his troopers into Maryborough to disperse the town blacks. A couple were shot in the street; others were picked off while swimming in the river. By then a crowd had gathered to witness the spectacle...Townpeople undertook their own vigilante action to capture presumed offenders or to drive the local blacks out of town (Franklin and White, 1991, 8).

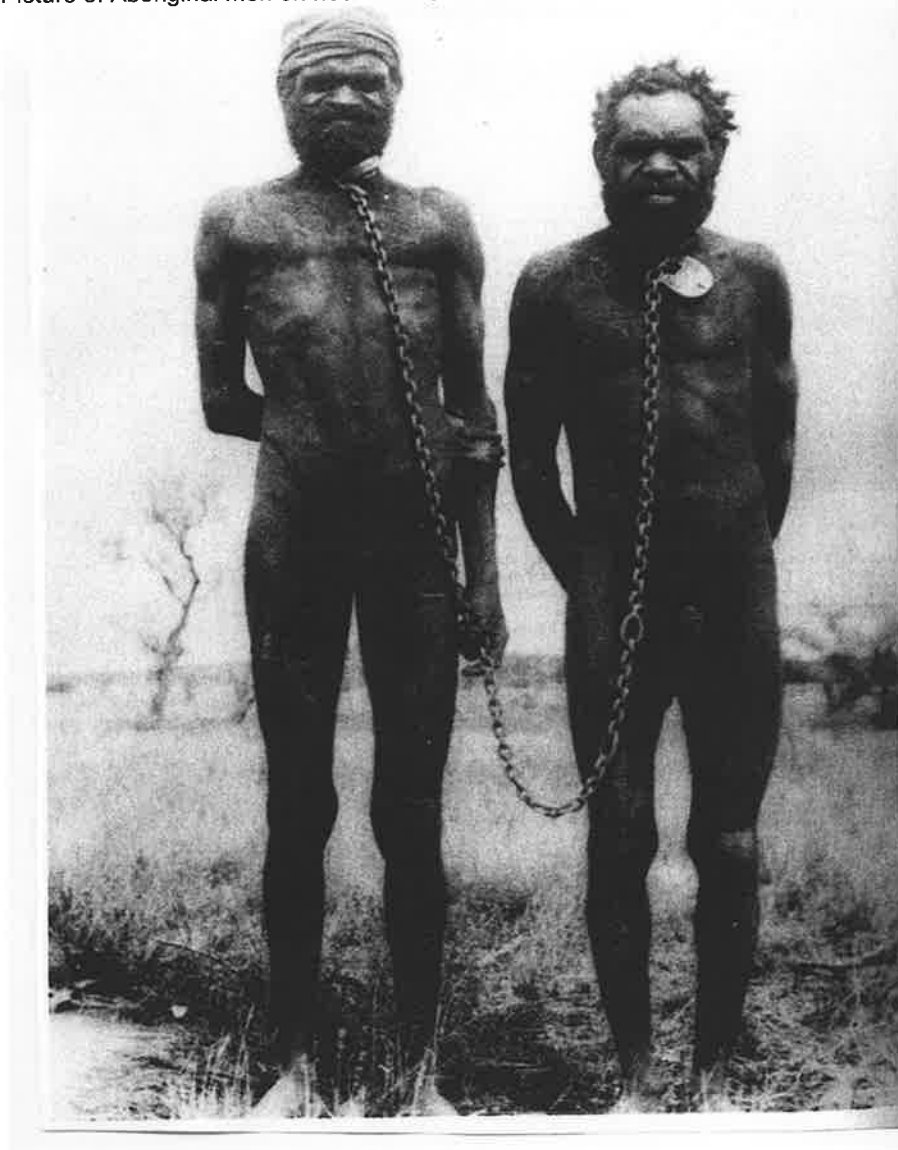
These examples of terror, fear and brutality were deliberately administered well into the 20th century. The impact of brutality during these years can provoke emotional and psychological reactions from anyone. It is reasonable to assume that Aboriginal children have lived with significant psychological and emotional scars. Other punishments including threats of death was also documented. One observer of such brutality stated:

I have seen Aboriginal men living under such extraordinary terrorism; many of them fine athletic fellows who could in case of a row have settled with their terrorisers in a very summary fashion. But many of them had long been treated as dogs are treated and were scared into a belief that their employers wielded the power of life and death (Franklin and White, 1991, 8).

Aboriginal people were described as "uncivilised" [sic], "savages" [sic], and the British colonial rulers inflicted heavy damage on Aborigines under the cloak of civilisation. In fact, it was the Aborigines who treated the Europeans with civility and respect as they thought that they (Europeans) were passers-by. The Europeans' treatment of Aborigines showed savagery, absence of any respect for humanity, and there was no sign of civilisation at all. If the manner in which Europeans treated Aborigines is to be regarded as a practice of a civilised society, then we still have a long way to go to

distinguish civilised from uncivilised and savages from gentles. Picture 3 amply demonstrates how colonial authorities treated Aborigines.

Picture 3: Aboriginal men on neck chain.



Source: Mattingley and Hampton, 1998.

Describing the treatment of Aborigines, Holland (1992) stated that “they were treated like war criminals”. The above picture shows the situation was far worse than the treatment of war criminals. Even those who submitted

to force and rendered domestic services in the form of slavery did not escape violence. It was systematic terror. "Aborigines died from injuries received while being 'disciplined' [sic] with whip, fist and boot" (Franklin and White, 1991, 4). Aboriginal people who were forced into domestic slavery had no rights, let alone saying, "looking a white man straight in the eye [and] assuming a facial expression [were] considered inappropriate for a 'nigger' [sic] – each one merit a fist in the face, a boot in the balls or a stockwhip around the shoulders" (Franklin and White, 1991, 9).

Aboriginal people were exploited, physically abused and emotionally humiliated, and did what their masters asked them to do. Their names were changed to 'nigger', 'coon', 'boong', 'abo' and 'jacky' [sic] (Franklin and White, 1991, 9). This sort of practice not only forced Aboriginal people to submit to exploitation, but also disarmed them emotionally and psychologically, and eroded their confidence. It was destined to have a long-term impact on the Aboriginal people's emotional strength. These terms have been banned since the introduction of the Equal Opportunity Act and Anti-Discrimination Act. However, it appears that private feelings remain significantly negative towards Aborigines. This was evident in the emergence and popularity of the One Nation Party, which campaigned for discriminatory policies against Aborigines (Reynolds, 1999).

Until recently, public opinion has continued to humiliate Aboriginal people. Expressions like "keep them under, keep them down [and] keep them in their place" have been uttered and set back the relations between black and white.

[The] outback settlers did not look upon the flogging of a black girl or the ill treatment of a black boy as anything wrong ...these things to them are only discipline [Sic], only means of improving the race. Heavy physical attack was commonly chosen means of "punishing" Aboriginal people. One settler stated that "it was no use to hit a black fellow with your fist, he won't feel it ... heavy boot or a stout stick, or an iron bolt or a stockwhip, were legitimate and suitable instruments for hortatory or punitive purposes (Franklin and White, 1991, 9).

These types of brutalities continued for generations with serious consequences for Aboriginal people's health and wellbeing.

These acts and other prior victimisation have been responsible for various psychological problems, resulting in alcohol abuse as a means of self-medication. It is no doubt that those individuals who were subjected to those events were tormented and haunted by the memories of these experiences. It has been documented that they passed the information of their experiences to their children, thus creating an inheritance of traumatic memory (O'Shane, 1995; Atkinson, 1999). This facilitated the development of transgenerational trauma.

Aboriginal people were subjected to violence, terror and other abuses capable of evoking fear, hopelessness and humiliation. As a result of these historical events and trauma that they are encountering in their day-to-day life, significant numbers of Aboriginal people have resorted to destructive means of relieving their psychological pain. In this study it is assumed that PTSD is one of the major psychiatric problems affecting Aboriginal people, and is further complicated by alcohol and other substance abuse. The core of Aboriginal people's trauma has been a matter of political debate rather than practical solution.

2.3.6. Institutionalisation

From the beginning of colonisation in Australia, institutionalisation was used on the one hand to control, reduce and eliminate Aboriginal resistance to occupation, and free the land for settlers, and on the other hand to destroy culture (Reynolds, 1999; Horton, 1994; Franklin and White 1991). It took place in the guise of “protecting them”, “civilising them”, “solving their problems” and “providing them with a better future” (Horton, 1994). Picture 4 shows a marked contrast between what was said and what actually happened.

Picture 4: “Native stockman in neck-chain after sudden mental derangement in 1935”.



Source: Mattingley and Hampton, 1998.

Institutionalisation targeted children with a view to changing their Aboriginality. Adults were confined to reserves and missions and those who were regarded as uncontrollable were treated as shown in Picture 4 in a more barbaric manner. One person described the effects of events like these: “my father, seeing him getting beaten with a stockwhip. He was chained to a tree” (Atkinson, 1999, 40).

Until recent decades, Aboriginal people were partially or wholly institutionalised, either out of conviction that they were not able to manage their own affairs, or literally, out of a genuine disposition of government that they required protection and care (Hunter, 1996, 1997, 1998a, 1998b; O’Shane, 1995; Peters, 1995; Franklin and White, 1991; Winch, 1989; Stone, 1974). Australia’s proud motto of a “fair go” was unthinkable when applied to Aborigines. They were treated as not being fully adult or able to care for themselves and their families. Neither political leaders nor neither religious figures advocated for them. In fact, they colluded against Aboriginal people and herded them onto camps and reserves. It was reported that:

Whether they were kind and loving paternalists, or rigid cruel disciplinarians, none of the whites employed in settlements believed that Aborigines deserved equal treatment, none consulted their charge about their present and future, none regarded Aboriginal men and women as fully developed adults and therefore, capable of caring for their children in a proper manner, none saw anything inhuman in removing children from their parents or in uprooting families to the convenience of Europeans (Franklin and White, 1991, 11).

While herding of Aboriginal people was introduced as early as the late 18th century, three methods were introduced in the form of official government

policy. These were Protection, Assimilation and Integration (Horton, 1994; O'Donoghue, 1993).

Assimilation is the process by which a dominant cultural group absorbs a suppressed group into its society and ultimately destroys the subjugated group (Horton, 1994). The process of assimilation involved two methods: 1) absorbing those who were capable of being "civilised" [sic] into general society; and 2) herding in reserves those who were deemed "unsuitable" [sic]. These strategies were based on the assumption that those who were in reserves would eventually "die out" and those who were absorbed into general society would eventually "breed out", and that would solve the problem (Horton, 1994). Governor Hindmarsh of South Australia made the following remark in his speech to Aboriginal people: "Black men, we wish to make you happy. But you cannot be happy unless you imitate white men. Build huts, wear cloths, work and be useful. Love white men, learn to speak English" (Horton, 1994, 69).

Despite all the efforts, including forcible removal of Aboriginal children, the assimilation policy failed to achieve its desired goal and was abandoned by the 1970s and replaced by Integration as an alternative social policy (Horton, 1994). The only change that was delivered here was halting the official removal of Aboriginal children from their parents. During the policy of integration and multiculturalism, the suffering of Aboriginal people has continued as previous harsh policies have resulted in more complicated health and social disadvantages. State and Federal governments appear to have failed to deal with the real issues that are affecting Aboriginal people.

At every available opportunity, Aboriginal people pointed out that alcohol and other drug abuse, violence and juvenile crime are the result of past injustice, and need a systematic approach in order to resolved. However, this has attracted a strong criticism by senior politicians calling on “Aboriginal people to stop blaming past injustices for family dysfunction” (*The West Australian*, Aug. 22, 2003, 4). The lack of understanding of how Aboriginal people were affected by past injustice and society’s failure in general and governments in particular to deal with it is a major obstacle in the process of addressing Aboriginal people’s health and social concerns. This failure originated from institutionalisation itself, where authorities took the paternalistic view that “we know what is good for you”.

Institutionalisation meant that Aborigines were prevented from leading an independent life. They became dependent on handouts and prevented from utilising available resources on the land that had been taken over by white farmers (Thomson, 1991; Franklin and White, 1991; Stone, 1974). They were humiliated and terrorised. While those who were chained humiliated and terrified, the message to the rest of the population was very clear, “if you don’t do what we want you to do, this would be your fate”. For today’s generations, seeing photographs such as Picture 5 below can be heart breaking and may contribute to the ongoing mistrust between the two races. When there is no genuine acknowledgement and apology about what had happened in order for the healing to begin, this will continue to be the case.

Picture 5: Aboriginal men and children [boys] in neck chain.



Source: Mattingley and Hampton, 1998.

While adults were mistreated as shown in Picture 5 above, children were removed and institutionalised under the guise that “Aboriginal parents were incapable of caring for their children” (Clarke et al., 1999; Peters, 1995; Franklin and White, 1991). Adults were relocated onto reserves and missions, and restricted from movement under the policy of “protection” (Clarke et al., 1999; Hunter, 1998a; Franklin and White, 1991; Stone, 1974). Institutionalisation is believed by many to have dispossessed Aboriginal

people of their identity, self-esteem, and personal and collective independence.

2.4. Consequences of exposure to traumatic events on Aboriginal people

2.4.1. Health and wellbeing

The impact of exposure to traumatic events has had severe consequences on the health and wellbeing of Aboriginal people. While the list of consequences is ongoing, the most relevant to this study are alcohol abuse and domestic and other violence. Compounded by socio-economic disadvantage, these consequences promote traumatisation and increase the vulnerability of Aborigines to poor health outcomes. The problems being encountered by Aboriginal people have a long history. According to Atkinson (1999, 39):

In tracing some of these experiences, I found patterns that I began to call trauma lines, running through particular families across five or six generations became apparent. These trauma lines show the increase of so-called mental illness, alcohol and drug misuse, sexual and physical abuses and suicide attempts that reflect the pain of people's lived experiences today. These are both experiences of the individual and the collective. The common factor linking people is the pain and behaviours arising from the pain, there is the pain of violation and loss, pain of anger, pain of feeling helpless and powerless, pain of despair and fear of more pain. Such family and community trauma has repercussions on the total well-being of Aboriginal families and communities across generations as people feel bad about who they are, what has been, and is being done to them, what they do to themselves, and to others.

The negative effects of traumatic experiences over many generations have many layers of traumatic memories and manifest themselves in many forms of re-traumatisation.

Today Aboriginal people's health status is at the bottom of the scale and their mental health is at crisis point as a result of continued traumatisation and associated alcohol abuse, which is maintaining the status quo and contributing to a vicious cycle of violence (Spencer, 1983; Kyaw, 1993; Swan and Raphael, 1995; Mckenderick, 2000, 2001; Peace, 2000). Johnson (1992, 53-55) pointed out that:

It has been well tabulated that any group of people subjected to colonialism and destruction of culture have travelled down the same road of ill health and early death due to powerlessness and sense of loss.

In comparison to Aboriginal people's health status in pre-colonial era (see section 2.2.2), their current health status can be described as the poorest of the Third World. Many authors attribute Aboriginal people's poor health to exposure to major traumatic events, which occurred as a result of colonisation (Horton, 1994; O'Donogue, 1991; Franklin and White, 1991; Winch, 1989; Swan, 1992; Stanner, 1979; Byrnes, 1983; Broome, 1982). Byrnes (1983, 20) predicted:

An Aboriginal child borne in 1980 is four times more likely to die before the age of one, twenty times more likely to have a chronic skin infection, twenty times more likely to have trachoma. The same child would be liable to suffer from diarrhoeal diseases, ongoing behavioural problems, and diseases such as pneumonia, influenza and measles. As an adult, the person would [be]: three times likely to go blind from preventable causes, twenty times more likely to have diabetic conditions, more likely to contract leprosy, TB, VD and to have heart disease or hypertension.

Specific consideration of Aboriginal mental health shows complications with alcohol abuse, which is the manifestation of the past and present traumas. In the current approach to Aboriginal mental health concerns, there appears to be a systemic conflict, arising from differing belief held by Aboriginal people and service providers. Aboriginal people consider health holistically and define it as follows: "health does not just mean the physical wellbeing of the individual but refers to the social, emotional and cultural wellbeing of the whole community" (Johnson, 1992, 156). They also see mental health from this holistic view. National Aboriginal Community Controlled Health Organisation (1993) summarised mental health:

For Aborigines, mental health must be considered in the wider Aboriginal concept of wellbeing context of health and wellbeing. This requires that this health issue be approached in the social emotional context and that both social emotional health and psychiatric disorders encompass oppression, radicalism, environmental circumstances, economic factors, stress, trauma, grief, cultural genocide, psychological processes and ill health.

This view is contradicted in our current approach, which is established in the form of specialised mental health services and focuses on treatment and rehabilitation of an individual rather than family and community as a whole. The current provision of specialised mental health services to Aboriginal people is not utilised sufficiently because it generates stigma and also contradicts their fundamental belief system about health and wellbeing. Swan and Raphael (1995) highlighted the need to develop an integrated mental health programs for Aboriginal people.

2.4.2. Domestic violence and violence in general

Indigenous domestic violence ...[is] an epidemic without root in Aboriginal culture. Violence in Aboriginal families was a direct result of Australia's colonial history (*The West Australian*, August 22, 2003, 40).

The above statement was made by Jacky Huggins, historian and co-Chair of Reconciliation Australia and appeared in *The West Australian* newspaper. It was in response to comments made by the Premier of Western Australia about a car crash involving Aboriginal children. The issue of domestic violence in the Aboriginal community is misunderstood and as a result, interventions by law enforcement agencies and social services have produced little result. Misunderstanding has resulted in failed intervention. For example, domestic and community violence are often interpreted in the context of Aboriginal culture – that “violence is a part of their culture”, “they are aggressive people”, “they usually hit each other”, etc. In fact the gentleness and generosity of Aboriginal people were well documented by early colonisers (see section 2.2.). Today, the violent crime rate in Aboriginal communities is higher than the national average (Crime Research Centre, 1997, 1999).

In Western Australian rural towns, where the presence of Aboriginal people is relatively high, both seriousness and rates of crime are higher than metropolitan areas. For example, the Midwest region is second to Perth, followed by the Goldfield region and Kimberley region in terms of property crime (Crime Research Centre, 1997). The Kimberley region leads the state in violent crime, followed by Pilbara, Gascoyne, Goldfield and Midwest. This

clearly suggests that there is a need for better understanding of the underlying issues to address those problems.

The high rate at which Aboriginal people are incarcerated in the prison system indicates the underlying factors contributing to their vulnerability. One study summarised the impact of Aboriginal people's contact with the legal system:

Of course, it is well understood that Aboriginal contact with all parts of the criminal justice system is much greater than that of non-Aboriginal contact and that, consequently, we can expect official crime figures, arrest data, court business and so on to be markedly higher in areas where there rate relatively high Aboriginal populations (Crime Research Centre, 1997, 11).

The study further highlighted the higher rates of domestic and family violence among Aboriginal populations. In violent crime Kimberley took first place followed by Pilbara and then Gascoyne. A similar finding is observed for the drug crime rate; Goldfields and Esperance took first place while Wheatbelt occupied second place followed by Pilbara. This interesting trend indicates that the Aboriginal people have a greater risk than white people for exposure to traumatic events, alcohol abuse and retraumatisation. However, there is no established rate of PTSD.

To address these problems, several underlying factors need to be identified and understood. This increased level of violence both at domestic and community levels may be manifestations of prior victimisation. Begic and Jokic-Begic (2002) pointed out that victims of violence are likely to become violent themselves. The risk factors of violence include: childhood abuse and neglect (Di Lillo, Giuffre, Tremblay and Peterson, 2001; Sumner, 1995); alcohol and drug abuse; low socio-economic status; low intellectual threshold;

and psychiatric disorders (Bassuk, Dawson, Perloff and Weinreb, 2001; Maes, 2000). Again pointing to links between prior victimisation, PTSD and violence as well as alcohol abuse as a mediating factor in further violence (Begic and Jokic-Begic (2001), cultural differences and ethnicity (Pole, Best, Weiss et al., 2001), and gender are also risk factors.

Di Lillo et al. (2001) found that people with a history of child sexual abuse had relationship problems and likely to be abused further. Begic and Jokic-Begic (2002) argued that exposure to violence leads to PTSD and other disorders, and some of the PTSD symptoms include violence. Begic and Jokic-Begic (2001) reported that up to 95% of all combat veterans with PTSD have symptoms of aggressive behaviour. Begic and Jokic-Begic (2002, 625) concluded that resilience factors such as “longer education, family and marital status, status, social support, and a higher socio-economic status play some kind of protective role in the occurrence of PTSD”. Any attempt to address those problems in Aboriginal communities needs to coordinate various sectors to establish a healthy partnership with them. Health outcomes are strongly linked with employment, recreation and sports, and education. These need to be coordinated. Mere implementation of community policing to minimise crime will not produce desirable outcomes.

2.4.3. Alcohol abuse

Alcohol and other drug abuse are common problems in the Aboriginal community as the people continue use of them as a means to relieve their

inner pain and suffering at times of despair. Despair, accompanied by a dangerous reliance on alcohol and other drug abuse, is causing serious damage to the future of Aboriginal society (Australian Institute of Welfare, 2003). The above national average alcohol and other substance abuse in Aboriginal communities are due to exposure to traumatic events and consequential self-medication. Chilcoat and Breslau (1998) noted that PTSD predates the onset of substance abuse in those who were exposed to traumatic events. Various factors that contribute to excessive alcohol consumption include the need to suppress feelings associated with traumatic experiences, getting relief from intense inner pain, and gaining temporary energy to confront the reality of trauma.

In Aboriginal people's case, core contributing factors are linked to everything that has had happened to them due to colonisation and the development of modern, industrialised Australia. The other issue is what was done in the name of protection. Aboriginal people were denied access to alcohol, while at the same time some settlers supplied alcohol to them in the form of salary for cheap labour and exchange for sexual privilege (Hunter, 1993a; Broome, 1982). Aboriginal people were prohibited from accessing alcohol until 1957 in Victoria, 1963 in New South Wales, 1964 in the Northern Territory, 1971 in Queensland and South Australia, and 1972 in Western Australia (Hunter, 1993a). The prohibition was so appealing; no one could argue it was bad legislation.

However, prohibition means that Aboriginal can only watch their white counterparts drink alcohol and socialise. The social role of alcohol and

prohibition of it to Aboriginal people gave the impression that it is also one of the many things that Aboriginal people had lost as a result of colonisation. Hence gaining access to alcohol amounted to having equality and certain rights (Hunter, 1993a). Once it was legalised for Aboriginal people, alcohol provided a means for self-expression and demonstration of power in a drunken state. This may have changed the meaning and value of alcohol. Alcohol also provided a forum for socialisation. "White fella" as a role model - socialising when using alcohol - is an important factor. As alcohol is one of the many consequences of colonisation, there was no Aboriginal law to deal with its effects and the elders may have had little role to play (Hunter, 1993a; Broome, 1982; Stone, 1974). There have been a number of factors contributing to problem drinking:

1. Alcohol suppressed the feelings associated with trauma, loss, deprivation of right and denial of equality;
2. Prohibition and then permission to drink alcohol implied that it was a hard earned right for Aborigines; and
3. Social opportunity came with drinking alcohol.

The above three factors may have played an important role in the excessive consumption of alcohol in Aboriginal communities. A number of studies reported a high level of drinking affecting a significant proportion of the indigenous population. For example, a Western Australian study, which surveyed a group of Aboriginal people consisting of 44 males and 54 females, found that 86% reported that they drank one to three days per week (Sambo, 1988). Another study in a remote town of Western Australia surveyed 121

Aborigines (60 men and 61 women) and found that 87% of men and 67% of women consumed an average of 120 grams of alcohol the day prior to interview and 411 grams in a typical drinking session (Smith, Singh and Singh, 1987). Of the total participants 7% of men and 11% of women were ex-drinkers (Smith et al., 1987).

A Queensland survey involving a large sample - 1158 respondents - found that of 60% of participants were drinkers. From this group, 85% of men and 64% of women consumed a minimum of 7 alcoholic drinks per session (Harrold, 1989). Watson, Fleming and Alexander (1988) reported a Northern Territory study, which surveyed 1764 Aborigines and found 68% of all female drinkers and 69% of all male drinkers consumed alcohol at harmful levels.

Alcohol-related problems are becoming a national concern. However, the proportion of affected people in Aboriginal communities is particularly very high due to multiple risk factors (Pearson, 2002). Those factors are associated with colonisation and need to be addressed in a systematic and coordinated involving a genuine political approach that will result in better social and health policies and their implementation.

2.4.4. Transgenerational trauma

Transgenerational trauma is a relatively new concept to be recognised in the field of trauma. However, it is not new for Aboriginal people. It can be defined as a spiral of traumatic events that started in past generations and

continues to this day. It can also be referred to as a trauma that is passed onto children in the form of story telling.

One may argue that a trauma ends with a person who is involved as a primary or secondary victim. Regarding Aboriginal people's experience, this may not be the case (Atkinson, 1999; Hunter, 1998a). For many reasons the suffering of Aboriginal people has not ended with those who were subjected to cruelty and brutality in the 19th century and the first half of the 20th century. It continues to affect the children of those who were subjected to violence (Hunter, 1998a; Clarke et al., 1999; Peters, 1995; O'Shane, 1995). Some of the reasons for this are that the trauma was well planned, politically engineered, and carried out systematically to produce a long-lasting impact. The children of those who were subjected to an organised and planned traumatic event were informed of the horrifying experience of their parents as a family history. One survivor stated that, "...people think the suffering stops with me. But I have passed these feelings, teachings on to my children not realising what I was doing" (Peters, 1995, 18).

The quest for the truth, the quest for an explanation and sense of guilt of surviving while others did not, continues to make those people angry, frustrated and at times feel helpless and fearful as if the situation is recurring. Some survivors work hard to provide extra protection (remain on guard) due to the fear that their children could be taken away (O'Shane, 1995). There has been no formal acknowledgment to help Aboriginal communities to deal with what had happened and embark on rehabilitation from the effects of the past traumatic experiences.

School texts designed for non-Aboriginal children told of the “primitive stone-age ancestors of Aboriginals” or provided excuses for the ill treatment of Aboriginal people and did not teach what actually happened and the injustices inflicted (Reynolds, 1996a; Franklin and White, 1991; Stone, 1974; MacKenzie, 1928). This has drawn criticism because society is deceived into thinking that Aboriginals are unproductive and do not make any contribution to Australia’s social and economic development. In other words, they are dependent. This social and economic dependence is largely related to the traumatic events they have experienced and continue to experience.

2.5. Misunderstanding of Aboriginal people and their experience: role of science and medicine

[When trauma is left unaddressed] it can be driven further into our souls and it colors all aspects of our life. Without healing, it will destroy the human soul as any other illness left untreated will in time cripple and kill the body (Napolean, 1991, 1).

Either out of 18th century European ignorance or an analytically limited way in considering societies with different ways of life, culture, values and beliefs, the Aboriginal people were misunderstood from the very beginning of colonisation. The British considered agricultural development and permanent housing as the only indicators of the usage of land. The absence of these indicators meant that the land was not owned by anyone; therefore Australia was declared “terra nullius” (Reynolds, 1996b). This was the basis for dispossessing Aborigines of their land. The British regarded Aborigines as

subhuman. This belief played an important role in the violence against Aboriginal people.

Science and medicine formed a foundation for this belief and subsequent discriminatory policies and practices (Hunter, 1998a; Reynolds, 1996a; MacKenzie, 1928). Reynolds (1996a, 112) reported that the English scientist W. Lawrence said in his 1819 lecture on *Comparative Anatomy* that differences between racial groups “both in bodily formation and in the faculties of the mind, are so striking, that they must have attracted the notice even of superficial observers”. According to Reynolds (1996a) an American scientist, S.G. Morton, who classified racial groups by measuring the volume of skulls, regarded Aborigines as the lowest group of mankind.

In the early 20th century, an organisation called “Congress of the Australian Association for the Advancement of Science” reported that Aboriginal people were insensitive and do not feel pain as developed races do (Reynolds, 1996a). Hence science consistently argued that not only Australian Aborigines but also all blacks in other parts of the world were inferior in mental capacity. Religious groups also shared this view. For example, an organisation known as the “Society for the Propagation of Christian Knowledge” asserted that “having a much less highly developed nervous system, [Aborigines] feel pain to a much lesser extent than we do” (Reynolds, 1996a, 121).

Directly implicating medical science in this race debate Professor William Colin MacKenzie stated during the *Joseph Bancroft Memorial Lecture* in 1928:

Remember that primitive man, with abducted lower limbs and sagging knees, had a fight to maintain the erect posture. The Aboriginal with his thin legs and long arms is nearer to these people than we and his so-called laziness has a physiological basis. The Aboriginal boy sitting at school on seats without backs, directs only part of his attention to lessons; the rest is devoted to keeping himself erect (MacKenzie, 1928, 429).

This statement could affect not only medical practice, but also education and other institutions dealing with Aboriginal people. This had a negative impact on the relationship between mental health services and Aboriginal people. Aboriginal people responded to mental health intervention in the country sector by stating “we were bad, now we are mad”.

Adding weight to this belief, Charles Darwin’s theory of evolution had a wide-ranging influence not only within the scientific communities, but also on ordinary citizens and social policy makers. Denied their humanity by science, Aboriginal people were subjected to abuse of power and trust by successive authorities, abuse of knowledge by conservative socio-political think tanks and policy makers, and deprived of basic and fundamental rights that are essential for the development of a cohesive society.

Both in medicine and psychiatry, a lot has been done since Professor MacKenzie’s lecture and the relationship is now much better than it was about 75 years ago. However, health professionals are still limited in understanding Aboriginal people and quick to make a diagnosis at face value. Some of these diagnoses are what mainstream society thinks of an Aboriginal person, i.e. “alcoholic”, “violent”, “irrational”, etc. It is time to move from these sorts of generalisations to understand of Aboriginal culture and history as a whole (Brown and Larner, 1992).

During a presentation of this study the author encountered the following question from an audience of professionals: “if they have been living with this trauma for generations, how can they have PTSD?” The classic example of the old scientific explanation that “Aborigines are less sensitive to pain” still circulates in the minds of some professionals. A similar view echoed elsewhere in regards to PTSD implying that the disorder affects those who are socially privileged and have economic advantage (Summerfield, 2001). This simply suggests that we have a long way to go in terms of understanding Aboriginal people in order to serve them effectively.

The political controversies surrounding the Aboriginal people's experiences appear to have made any attempt to address the current issues as controversial as the actual event. A recent newspaper headline carrying the statement of a senior politician calling on “Aboriginal people to stop blaming past injustice and get on with life” (*The West Australian*, Aug. 22, 2003) is indicative of the failure of current government approaches or an attitude that still exists in the community that Aboriginal people are “less sensitive to pain”. They are, therefore, less likely to sustain emotional and psychological scars for what happened.

There is a need to understand those factors influencing Aboriginal people's health and lifestyle in general and mental health in particular. Any attempt to address current health concerns, including alcohol misuse needs to take into account the historical factors. It is important for professionals and service providers to stop having a ‘blame the victim’ attitude and acknowledge that Aborigines' feelings and difficulties have legitimate sources.

This 'blame the victim' attitude has shaped the destructive behaviour being observed in Aboriginal communities. They feel it is their failure to consume alcohol excessively, to be poor, to be unemployed, not to be educated, etc. Historical documents show that authorities in the past promoted negativity about being an Aboriginal person and strongly linked it with failure (Stone, 1974; Franklin and White, 1991). Attempts by authorities in the past to divert responsibility and lay the blame on victims have contributed to Aborigines' current psychosocial health problems. This misunderstanding about Aboriginal people's feelings is preventing them from dealing with current realities in any systematically organised way.

2.6. Summary

The literature suggests that there are many issues to be understood and responding effectively to Aborigines' health concerns has failed due to misguided socio-economic policies and political processes. The nature of authorities' involvement in the lives of Aboriginal people had negative consequences. This added to already internationally recognised legal and financial controversies surrounding PTSD. Evidence suggests that Aboriginal people's trauma has been politicised and not dealt in a manner that promotes recovery and healing.

Another controversy is associated with complications related to diagnosis, management and treatment of people suffering from this condition. The complication is primarily linked to this population's effort to self-medicate,

using alcohol and other substances. In addition, this group of people is likely to be involved in retraumatisation as perpetrator or victim. These and other issues divert the focus of both professionals and organisations away from the reality of PTSD in Aboriginal communities. The lack of PTSD studies with regard to Aboriginal people has made the application of the international diagnostic criteria for PTSD (ICD-10 and DSM-IV) very limited in the context of trauma. Partly, retraumatisation is the result of intervention to fix past problems. This in turn resulted in the minimal identification of PTSD as a major disorder in this community.

For example, despite the enormity of the trauma experienced by Aboriginal Australians, the study of PTSD in Australia concentrated only on war veterans, motor vehicle accidents, natural disasters, sexual crime victims, and refugees and migrants (Silove, 2000, 2002; Silove, Steel and McGorry, 2002; Steel, Silove, Bird and McGorry, 1999; Cunningham and Cunningham, 1997; Kinzie and Fleck, 1987). The absence of a study on the clinical aspect of PTSD in the Aboriginal population is disappointing. It has resulted in a somewhat incomplete understanding and at times misrepresentation of Aboriginal people's mental health.

While the clinical aspect of PTSD in Aboriginal people has attracted little research attention, there were several studies that documented the social and political aspects of the traumas experienced by the Aboriginal people (Hunter, 1995, 1996, 1997, 1998a; Clarke et al., 1999; Fredericks and Atkinson, 1998). Others documented the political nature of a wide range of traumatic events and their impact on Aboriginal people's life and mental

health (Biles et al., 1989). It seems that while those reports prepared by government bodies and Aboriginal organisations highlighted the political aspect of such trauma, there are limited scientific studies on PTSD as a clinical condition. This may be out of fear that the findings from a clinical study could be used for political purposes or financial benefit, or as the basis of compensation by interest groups.

This study attempts to explore the links between these experiences, alcohol abuse, and prevalence of PTSD. However, undoubtedly this raises a number of questions. Can the Aboriginal people's experiences cause PTSD? Can those events fit in to the diagnostic criteria outlined in DSM and ICD? To address these questions one needs to understand the pathway of PTSD. The following chapter reviews the literature on PTSD from a global perspective.

It should be noted that this study by no means intends to ignite legal and political controversies over what has happened to Aboriginal people. The study merely explores and describes the impact of those events in the context of prior victimisation, resultant PTSD and alcohol abuse. It aims to contribute to the existing body of knowledge and fill the gap that has resulted due to the lack of research in this area.

Chapter 3: Posttraumatic Stress Disorder

Nineteenth century views about the serious consequences to the individual exposed to emotional-psychological trauma still remain with us. We continue to hear opinions that no clinical entity exists as the consequences of such exposure, or that those who complain of continuing psychological and physical distress from such experiences are merely malingering. Such views are held even by some who are considered professionally learned (Kolb, 1993, 293).

3.1. Introduction

As shown in Chapter Two, Aboriginal people are one of the most traumatised people on earth. Their current mental and general health status indicates traumatisation of generations. However, it is rare to see an Aboriginal person diagnosed with PTSD. On the one hand political and medico-legal concerns may have played a key role, in terms of identifying the impacts of accumulated traumatic experiences. On the other hand Aboriginal people's traumatic experiences such as removal of children, massacres and killings that had occurred several decades or even over a century ago fall outside the range of diagnostic criteria listed in DSM and ICD (APA, 1994; ICD, 1992). This raises questions like: where does the Aboriginal people's traumatic experience fit? Are the Aboriginal people's current conditions indicative of a widespread PTSD?

In this chapter, the literature about PTSD will be reviewed. Areas covered in this chapter include historical perspectives, diagnostic criteria in DSM and ICD, limitations of DSM and ICD, aetiology of PTSD and

epidemiology. Co-morbidity and dual diagnosis also will be discussed. Ethnocultural concepts of PTSD will be covered in the latter part of the chapter.

3.2. Historical perspective

The history of civilisation has been marked with national, regional and international conflicts and natural disasters (Zwi, 1991; International Federation of Red Cross and Red Crescent Societies, 1993; Wilson and Raphael, 1993). Exposure to a severe traumatic event can result in a serious psychological reaction and may cause a number of psychiatric disorders including PTSD. One of the most likely psychiatric disorders to emerge after exposure to traumatic event is PTSD (McFarlane, 1996, 1998; Yehuda, McFarlane and Shalev, 1998). Until the 20th century, if a person did not sustain physical injury – cuts or bruises or loss of limb – little attention was given to identify any psychological damage and by large the society assumed that none was required.

Now it is understood that symptoms similar to PTSD were documented as early as the 17th century (Daly, 1983). However, until the second half of the 19th century, medicine had little concern with effects of trauma on psyche and some of the victims (O'Brien, 1998; Young, 1995, 2000; Erichsen, 1859, 1866, 1872, 1883). In the second half of the 19th century John Erichsen encountered victims of a railway accident with complicated symptoms, similar to PTSD. It was all confusing and unclear. Erichsen summarised it as follows:

We do not know how it is that when a magnet is struck a heavy blow with a hammer, the magnetic force is jarred, shaken, or concussed out of the horseshoe. But we do know that it is so, and that the iron has lost its magnetic power. So, if the spine is badly jarred, shaken, or concussed by a blow or a shock of any kind communicated to the body, we find that the nervous force is to a certain extent shaken out of the man (Erichsen, 1866, 95).

During this period, the impact of exposure to stressful events appeared to be confusing and was subject to debate (Young, 1995).

As the debate on this issue progressed and attracted further research, medicine in the late 19th and early 20th centuries started giving some attention to the treatment of conditions following traumatic incidents (Young, 1995; Janet, 1901, 1925). However, its focus remained on physical injuries and once the physical condition was treated it was assumed that the patient had fully recovered.

Four hundred years after the symptoms were first noted, in the late 20th century it was understood that a significant number of survivors of traumatic events suffer from what now is understood as PTSD. The symptoms of PTSD include intrusive flashbacks of the stressor, vivid memories, nightmares/dreams, deliberate avoidance of events that are associated with the stressor, difficulty in sleeping, irritability, poor concentration and hypervigilance (APA, 1980, 1987, 1994, 2000; WHO, 1992). A significant number of sufferers of this condition consume excessive amounts of alcohol as a means of self-medication to control these symptoms (Chilcoat and Breslau, 1998).

Although, the effect of exposure to traumatic events was clear, a definite description of the syndrome was not established until 1980. Up until

then, several different terms were used to refer to the disorders arising as a result of exposure to traumatic events. For example, in the late 19th century, terms such as railway spine, compensation neurosis and hysteria were used to refer to conditions arising following exposure to traumatic events (Dean, 1993; Kolb, 1993; Kardiner, 1941, 1947, 1959; Peterson, Prout and Schwarz, 1991). Following World War I the term “shell-shock” was used and in 1941 Kardiner put forward the term “traumatic neurosis”. Kardiner further pointed out that wartime traumatic stress is different from the trauma of civilian conflict and proposed “physio-neurosis of war” to refer to war-related traumatic disorders.

Prior to and during World War II, American psychiatry used terms like “minor personality disturbances, psychosomatic reactions, neurotic symptoms and reactions to combat stress” (Brett, 1996, 118). In 1948 the World Health Organisation (WHO) published the International Statistical Classification of Diseases, Injuries and Causes of Death, ICD-6 (WHO, 1948), which included mental disorders in its listing. Both the American and International system used different diagnostic terms to refer to the condition later registered as PTSD in DSM-III (APA, 1980) and in ICD-10 (WHO, 1992). Table 1 provides a comparison of diagnostic terms in reference to posttraumatic stress before the inclusion of PTSD in the American and International diagnostic systems.

Table 1: DSM and ICD references to PTSD before it's listing in DSM-III

International	American
<u>ICD-6 (1948)</u>	<u>DSM-I (1952)</u>
Acute situational maladjustment disturbance	Transient situational personality Gross stress reaction Adult situational reaction Adjustment reaction of: Infancy Childhood Adolescence Late life
<u>ICD-8 (1968)</u>	<u>DSM-II (1968)</u>
Transient situational disturbance Infancy	Adjustment reaction of: Childhood Adolescence Late life
<u>ICD-9 (1977)</u>	
Acute reaction to stress: With predominant disturbance of emotions With predominant disturbance of consciousness With predominant of psychomotor disturbance Other mixed	
(APA, 1952, 1968; WHO; 1948, 1968, 1977)	

As shown in Table 1, description of the syndrome following exposure to traumatic event was inconclusive and unclear. However, it should be noted that the nosology evolved together with the discipline of psychiatry. It indicates that the diagnostic criteria have been evolutionary and left the door open for further improvement by taking into account new knowledge in the field.

The spread of political and military conflicts, as well as natural disasters in many parts of the world, resulted in a dramatic increase in the number of people who suffer from the condition we now know as PTSD. While the impact of World War II gradually became evident, Korean and Vietnam War Veterans' issues resulted in a more significant and aggressive approach to the treatment and management of PTSD (McFarlane and de

Girolamo, 1996; Roszel et al., 1991; Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar and Weiss, 1990). Pressure was exerted on the specialty of psychiatry to diagnose the problem and come up with effective treatment and management plans (Dean, 1993; Rosenheck, Fontana and Errera, 1997). The second half of the 20th century saw concerted efforts by psychiatrists and mental health professionals to arrive at a meaningful understanding of PTSD and to develop treatment and management strategies (Brett, 1996; Wilson and Raphael, 1993). However, PTSD was not included in the list of psychiatric disorders in DSM-I, DSM-II and ICD (APA, 1952, 1968; WHO, 1968).

PTSD was first listed in psychiatric diagnosis in the Diagnostic and Statistical Manual, DSM-III (American Psychiatric Association [APA], 1980). Despite the official recognition of the condition as a psychiatric disorder, political, medico-legal and economic concerns seem to have overshadowed the diagnosis, management and treatment of PTSD. Sufferers appear to have been subjected to the opinions of non-medical personnel (McFarlane, 2004). Financial compensation remains a dominant concern for governments, organisations and companies in terms of dealing with the truth of trauma. In fact it seems rather obvious that the government's reluctance to deal with Aboriginal people's traumatic experiences and address its impacts is influenced by economic and political concerns.

In summary, following exposure to traumatic events individuals may develop changes in personality, behaviour and social life, at times resulting in impairment of social and physical functions. The two existing diagnostic

systems, the International Classification of Diseases, of Europe, and the Diagnostic and Statistical Manual of North America, adopted differing diagnostic terms such as acute situational maladjustment (ICD-6), transient situational personality disturbance, gross stress reaction, adult situational reaction and adjustment reaction (DSM-1). In the 1960s it was referred to as transient situational disturbance (ICD-8) and adjustment reaction (DSM-II). In the 1970s, the ICD-9 introduced acute reaction to stress with emotional, consciousness and psychomotor disturbances. Finally, the DSM-III introduced PTSD as a diagnosis of the condition following exposure to traumatic events and provided detailed diagnostic criteria. A decade later, ICD-10 adopted the same diagnostic term with similar criteria. The current diagnostic criteria of PTSD in both the American and European systems will be compared and discussed in the following section.

3.2.1. Diagnostic criteria for PTSD

The term Posttraumatic Stress Disorder (PTSD) was adopted and specific diagnostic criteria were outlined in DSM-III (APA, 1980). While this edition provided a foundation and framework for assessment and diagnosis of PTSD, it was narrow in its scope of definition of the stressor and the symptomatic evidence that is required to establish the diagnosis. Subsequent editions provided broader definitions of traumatic events and diagnostic criteria in DSM-III-R, DSM-IV, DSM-IV-TR and the ICD-10 (APA, 1980, 1987,

1994, 2000; WHO, 1992). The DSM-IV-TR (APA, 2000, 467-468) provides detailed diagnostic criteria. Details are as follows:

- (A) The person has been exposed to a traumatic event in which both of the following were present:
 - (1) The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others; [and]
 - (2) The person's response involved intense fear, helplessness, or horror. **Note:** In young children, this may be expressed instead by disorganized or agitated behaviour.

- (B) The traumatic event is persistently reexperienced in one or more of the following ways:
 - (1) Recurrent, intrusive and distressing recollections of the event, including images, thoughts, or perceptions. **Note:** In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.
 - (2) Recurrent distressing dreams of the event. **Note:** in children, there may be frightening dreams without recognisable content.
 - (3) Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). **Note:** In young children, trauma-specific reenactment may occur.
 - (4) Intense psychological distress at exposure to internal or external cues that symbolise the aspect of the event.
 - (5) Physiological reactivity on exposure to internal or external cues;

- (C) Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:
 - (1) Efforts to avoid thoughts, feelings, or conversations associated with the trauma
 - (2) Efforts to avoid activities, places, or people that arouse recollections of trauma
 - (3) Inability to recall an important aspect of the trauma
 - (4) Markedly diminished interest or participation in significant activities
 - (5) Feeling of detachment or estrangement from others
 - (6) Restricted range of affect (e.g., unable to have loving feeling)
 - (7) Sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)

- (D) Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:
 - (1) Difficulty falling or staying asleep
 - (2) Irritability or outburst of anger
 - (3) Difficulty concentrating
 - (4) Hypervigilance; and
 - (5) Exaggerated startle response.

(E) Duration of the disturbance (symptoms in criteria B, C, and D) is more than 1 month.

(F) The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Acute: if duration of symptoms is less than 3 months

Chronic: if duration of symptoms is 3 months or more

Delayed: if onset of symptoms is at least 6 months after the stressor
(APA, 1994, 427-429, 2000, 468-469).

There is no significant difference between ICD-10 and DSM-IV (APA, 1994; WHO, 1994). The core principles of the criteria remain the same in both systems. The difference is that the DSM text provides more detailed information than the ICD. The ICD-10 PTSD diagnostic criteria are:

A. The patient must have been exposed to a stressful event or situation (either short- or long-lasting) of exceptionally threatening or catastrophic nature, which would be likely to cause pervasive distress in almost anyone.

B. There must be persistent remembering of 'reliving' of the stressor in intrusive 'flashbacks', vivid memories or recurring dreams, or in experiencing distress when exposed to circumstances resembling or associated with the stressor.

C. The patient must exhibit an actual or preferred avoidance of circumstances resembling or associated with the stressor which was not present before exposure to the stressor

D. Either of the following must be present:

(1) Inability to recall, either partially or completely, some important aspects of the period of exposure to the stressor;

(2) Persistent symptoms of increased psychological sensitivity and arousal (not present before exposure to the stressor), as indicated by any two of the following:

(a) Difficulty falling or staying asleep

(b) Irritability or outburst of anger

(c) Difficulty concentrating

(d) Hypervigilance

(e) Exaggerated startle response.

E. Criteria B, C and D must all be met within 6 months of the stressful event or of the end of a period of stress (WHO, 1994, 169)

The essential criterion listed in both systems is that the person is exposed to a traumatic event. Both systems also point out the importance of criteria

listed in A, B and D diagnosing a person with PTSD. The important aspects of these criteria are that the “person’s response involved intense fear, helplessness, or horror”.

These phenomena - fear, helplessness and horror - are subjective. This subjective response is to be validated by a professional person. Some people can be fearful, helpless and easily horrified than others. Therefore, the underlying vulnerability of an individual involved in a traumatic event becomes one key factor in the development of PTSD. By listing those subjective phenomena, the diagnostic criteria in both systems are acknowledging the individual’s strength, weakness, and prior exposure as risk factors.

Some of the difficulties with both systems are, for example, in ICD criteria “the patient must have been exposed to a stressful event or situation (either short- or long-lasting) of exceptionally threatening or catastrophic nature, which would be likely to cause pervasive distress in almost anyone” (APA, 1994; WHO, 1992). This is subject to professional judgement where the social and political atmosphere of the time would play a key role.

PTSD is one of several disorders that are likely to develop following exposure to traumatic events. The difference in the relationships between exposure to traumatic events and development of PTSD, and other disorders is that disorders other than PTSD can develop without existence of a traumatic event, while PTSD cannot.

Traumatic events as well as the individual response to a stressor differ in many dimensions. Wilson (1989) listed 11 dimensions, which are believed to be essential factors in the development of PTSD. These are:

- 1) The degree of life threat;
- 2) The degree of bereavement or loss of significant others;
- 3) Imminence of the rate of onset and offset of the stressors;
- 4) The duration and severity of the stressors;
- 5) The level of displacement and dislodging of persons from their community;
- 6) The exposure to death, dying, injury, destruction, and social chaos;
- 7) The degree of the moral conflict inherent in the situation;
- 8) The role in the trauma (agent versus victim);
- 9) The location of the trauma (eg. home versus elsewhere);
- 10) The complexity of the stressor (single versus multiple); and
- 11) The impact of the trauma in the community (eg. a natural disaster).

Wilson (1989, 8-9)

Wilson's classification outlines important aspects of traumatic events in the context of factors that can contribute to the development of the PTSD. Some of these points, which are relevant to this study, are "the complexity of the stressor and the impact of the trauma in the community". Repeated exposure to a traumatic event is one of the risk factors, in which case it is well documented that the history of Aboriginal people is shaped by continuous trauma (Reynolds, 1999; Hunter, 1996; Horton, 1994; O'Donoghue, 1993). Wilson (1989) also pointed out the importance of the impact of trauma on a community. Here it appears Wilson was emphasising natural disaster. Worthy of mention are that traumatic events such as politically motivated state-sanctioned violence and oppression can have a far-reaching impact on the community (Hunter, 1996, 1998a; O'Shane, 1995; Horton, 1994; Franklin and White, 1991; Thompson, 1991).

Van der Kolk and McFarlane (1996, 6) underlined that "the critical element that makes an event traumatic is the subjective assessment by

victims of how threatened and helpless they feel. So, although the reality of extraordinary events is at the core of PTSD, the meaning that victims attach to these events is as fundamental as the trauma itself." It is that meaning and perception which results in PTSD rather than the event.

3.2.2. Limitations of DSM and ICD diagnostic criteria

Recognition of PTSD as a psychiatric disorder has provided several advantages both to victims and mental health professionals. Firstly, it supplied the victims with justification and legitimisation of their suffering as a result of exposure traumatic event. Secondly, it equipped psychiatry and other mental health professions with diagnostic guidelines and details of the condition. It allowed a systematic analysis and exploration of the impact of the traumatic experience on the psyche and soma of the sufferers. Thirdly, it facilitated a method of management and development of means of treatment.

Despite this important contribution, both diagnostic systems show a great deal of limitation in the context of indigenous people's experiences, culture, values and beliefs. Despite continued improvements in the diagnostic criteria for PTSD (DSM-III, DSM-III-R, DSM-IV and ICD-10), it is recognised that they remain limited in their scope (Friedman, 1998; APA, 1980, 1987, 1994) in cultural settings. Nevertheless, those diagnostic tools have covered an important diagnostic gap in the clinical practice of psychiatry (Friedman, 1998). However, the application of diagnostic criteria remains handicapped in the context of different cultural groups.

For example, application of the diagnostic criteria outlined in DSM-IV and ICD-10 to assess and treat PTSD in Aboriginal people is very difficult. The Aboriginal people's experience does not fall within the timeframe that is given in those diagnostic tools. Assessment of an Aboriginal person for PTSD needs to take into account the traumatic experience of this generation and at least the past three generations. Destruction of Aboriginal culture, values and beliefs together with atrocities, dislocation of family, dispossession and forcible removal of Aboriginal children are not directly experienced by the people born after the event.

However, those events have had wider community implications. They also can have a serious psychological impact on the children of those who were removed from their family. The difficulty is when one assesses an Aboriginal person who may have been exposed to those historical traumas or descendants of those who were exposed to these events, the event may not reconcile with criteria outlined in DSM or ICD criteria (APA, 1994; WHO, 1992). If longstanding traumatic events are to be taken into account, Australian psychiatrists need to propose the next edition to allow the consideration of trans-generational trauma.

Aboriginal people's traumatic experience is unique and its impact is compounded with ongoing traumatisation. As shown in Chapter 2, the traumatic experience of Aboriginal person does not die with the victims, but is inherited by the following generation. An Aboriginal person is not suffering only from the impact of his/her own traumatic experiences, but suffers from the combination of inherited trauma and one's own. The combined effect of

past and present traumatic experience increases complication and severity of the condition. Today, Aboriginal people exhibit very complex psychiatric problems, for which past events and present traumas are contributing factors. With the current diagnostic criteria, which require experiencing a traumatic event within a limited timeframe, there is a technical problem in assessing symptoms arising as a result of traumatic experience of many years. The Aboriginal people's traumatic experience cannot fall in acute or chronic or delayed category.

According to DSM-IV (1994) PTSD acute is coded 308.30 and PTSD chronic or delayed is coded 309.81. The PTSD acute can be diagnosed if there have been: a) onset of symptoms within six months of trauma, and b) duration of symptoms is less than six months. PTSD chronic or delayed type is characterised by: a) duration of symptoms of six months or more (chronic), and b) onset of symptoms at least six months after the trauma (delayed). Aboriginal people's experience – dispossession of land, dislocation of families, removal of children from their Aboriginal parents, persistent racism and massacres and killings – and symptoms arising as results of those events do not fit in the DSM-IV and ICD-10 description of traumatic events that can lead to PTSD.

3.3. Definitions of traumatic events

What makes an event traumatic? What criteria are used to exclude or include an event in the category of traumatic event? According to DSM and

ICD an event is traumatic if it provokes fear, or horror, or helplessness, or generated an intense emotional response (APA, 1994). World Health Organisation (1992, 147) defined an event that could lead to the development of PTSD as one that either is short- or long-lasting in terms of timeframe and is of “an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone”. All of those variables are subjective and vary from person to person. This subjectivity forms the core body of current debate about PTSD diagnosis being invalid in ethnic communities (Summerfield, 2001).

Generally speaking, traumatic events are divided into two groups, natural disaster and man-made violence (WHO, 2002). While both categories can cause PTSD, the latter has greater impact and is in fact responsible for the majority of PTSD cases and is the focus of this study. Encountering a stressor that is outside the range of commonly experienced events usually evokes significant symptoms of distress in most people. Exposure to a traumatic event may involve only one person. These types of traumatic events include rape, physical assault and motor vehicle accidents. Some traumatic events may involve a group of people or a larger community. Examples of these types of traumatic events are war and natural disaster – cyclone, earthquake, flood and fire, aeroplane crash, motor vehicle and industrial accidents. If the traumatic events cause a permanent physical damage, the trauma is made worse (Van der Kolk, McFarlane and Hart, 1996).

There is a range of man-made violence affecting a single person to as many as an entire nation. Variables such as sexual violence, robbery, motor vehicle accidents, etc can lead to both physical and psychological injury and can affect a single person or a group. War is one of the most disastrous examples of man-made violence that affects group, community and nation at large. Zwi (1991) reported that 21.8 million deaths as direct result of 127 wars since WW II. In contrast the International Federation of the Red Cross (IFRC) estimated that 40 million people have been killed by wars since WW II (IFRC, 1993). Since this report was released, several wars, including conflicts in Eastern Europe, former Soviet Republics, Gulf war, Asia and several conflicts in Africa have taken place. Most recently, a string of terrorist attacks and anti-terror wars have inflicted heavy casualties with the potential to make PTSD a single psychiatric condition affecting more people than any other psychiatric disorder.

The traumatic events listed above are of events regarded as capable of causing serious psychological problems. What really makes the event traumatic is the subjective response of the victim – perceived level of threat, sense of loss, and its significance than the objective measurement by an observer or bystander.

3.3.1. Prevalence of traumatic events

As our civilisation continues to expand industrially and technologically, changes including economic rationalism and globalisation are occurring at

breath-taking speed. Advances in military science are in turn contributing to ongoing wars, thus increasing the chances of exposure to traumatic events on a scale that has not been witnessed in the past. Through advanced communications technology, people are witnessing disaster; destruction, atrocities and horrific crimes are live on television screens. Listening to reports about rogue states possessing Weapons of Mass Destruction increases the level of fear. All these make the likelihood of being exposed to traumatic or distressing events almost certain.

Broadcasting the horror of war, terrorist actions (for example the hijacked aeroplanes crashing into the twin towers of the World Trade Centre), natural disasters and other accidents can serve as a reminder of any individual's previous traumatic experiences and may trigger existing symptoms of trauma or just a new emotional response (Lee, Isaac and Janca, 2002; Yehuda, 2002; Jehel, Buchet, Patereniti et al., 2001). Most recently, the "Iraqi resistance forces" abduction of Japanese citizens was broadcast internationally showing heavily armed militia wielding swords on their captives' necks and watched by millions around the world.

Traumatic events have been part of world history. Our world has been changing constantly and many of these changes have been achieved through wars and destruction. Furthermore, the world has also had to deal with many natural disasters. Although the concept of traumatic event was shaped in the field of psychiatry as partly a new emerging body of knowledge in PTSD, it has also been a part of human society. However, it attracted the attention of the scientific community by the late 19th century. Even with the emergence of

PTSD as a new clinical challenge for psychiatry in particular and mental health professionals in general, the prevalence of traumatic events has not been fully recorded and understood. This is because of the socio-cultural, socio-political and socio-economic factors influencing the occurrence of traumatic events in populations such as the Aboriginal Australians.

War is a man-made disaster and devastates a large population. On the other hand some natural disasters such as famine and drought have had human contribution in the form of economic and environmental mismanagement. Famine and drought have forced millions of people into starvation for prolonged periods of time where parents helplessly watch the slow death of their beloved children. In this scenario, natural disasters with human input are a daily phenomenon.

Besides war, the world has witnessed many massacres without a war formally declared. Some massacres are reported and attract the attention of local and international communities while others have been carried out without anyone taking notice of their occurrence. Victims and survivors are left with little or no help. For example, the Rwandan massacres and the Bosnian massacres were widely reported. On the other hand, various massacres in many African countries such as Ethiopia are silently occurring phenomena (Tola, 1998).

Another type of traumatic event is criminal victimisation, which occurs everyday. This includes violence, rape, physical and sexual abuse of children occurring at a greater frequency than other traumatic events. These events pass unnoticed in some parts of the world. Therefore, the prevalence of

these events often reflects those of Western democratic societies with effective judicial and legal systems.

A frequently occurring traumatic event is the motor vehicle accident. This type of traumatic event also occurs every day and reported accurately due to effective traffic and legal systems, and victims needing treatment. The existence of this traumatic event has been understood long ago. The development of a new form of war, terrorism, has added a new dimension to the list of traumatic events. Especially the new types of weapons used – aeroplanes and motor vehicles – have increased not only the occurrence of terrorist attacks, but also induced greater fear than any other events. Terrorism is more frightening due to the emergence of suicide bombers, in which human beings become walking destructive weapons. These latest developments in trauma have weakened our reliance on fellow humans at a time of disaster and tragedy.

3.4. Aetiology of PTSD

It is not a subject for argument that some people develop PTSD following exposure to traumatic events. The argument is why some develop PTSD while others do not. This is explained in the context of risk factors contributing to the development of PTSD. Explanations are drawn from a number of approaches used by scientific communities. These risk factors are associated with biological vulnerability, and psychosocial and cognitive

behavioural concepts. These will be discussed in this chapter. Firstly, the overall risk factors will be discussed below.

3.4.1. Risk factors

As with any other medical or psychiatric condition, there are risk factors for the development of PTSD. It is not a cause for argument that PTSD is caused following exposure to a traumatic event. However, it has been reported that not everyone exposed to traumatic event develops PTSD (Creamer and O'Donnell, 2002; Yehuda, 2002; Orcutt, Erickson and Wolfe, 2002; Bernat, Ronfeldt, Calhoun and Arias, 1998; Hermann, 1992). Several studies reported that a staggering one-third of the US population is likely to be exposed to a life-threatening situation at least once in their lifetime (McFarlane et al., 1998; Breslau, Kessler, Peterson and Davis 1999).

Regional terror and conflict have been translated to a global scale. The recent terrorist attacks in various parts of the world and counter attacks by the anti-terrorist coalition may have exposed a majority of the world population directly and indirectly to traumatic events through electronic and print media. If exposure to traumatic events alone were responsible for PTSD, all of the above reported population would have developed the condition. So, why do some people develop PTSD while others do not, after exposure to a traumatic event? What makes one more susceptible than other?

Creamer and O'Donnell (2002, 164) stated, "It appears that the development of PTSD is dependent on a complex interaction of pre-trauma, peri-trauma, and post-trauma variables". Pre-trauma risk factors include previous traumatic exposure – childhood physical and sexual abuse, and pre-existing psychiatric illness are believed to be increasing the likelihood of developing PTSD (Hill, 2003; Creamer and O'Donnell, 2002; Bassuk et al., 2001; Maes, 2000; Kessler, Sonnega, Bromet, Hughes, Nelson and Breslau, 1999; Yehuda, 1998; Horowitz, 1993). Peri-trauma risk factors include the severity of the trauma, the degree of threat and intensity of the victim's response (Creamer et al., 2001; Brewin, Andrews and Valentine, 2000; Yehuda, 1999; Young, 1995; Wilson, 1989).

Post-trauma risk factors include: poor social network, absence or lack of family support, physical disability from trauma and the degree of loss which may determine the likelihood of the development of PTSD following exposure to a traumatic event (Creamer and O'Donnell, 2002; Begic and Jokic-Begic, 2002; Creamer, Burgess and McFarlane, 2001; Maes, 2000; Ford and Kidd, 1998). Other mediating factors include premorbid personality, social class and socio-economic status, educational status, cultural background and ethnicity, and gender (Hill, 2003; Begic and Jokic-Begic, 2002; Creamer et al., 2001).

Halligan, Yehuda and Sinai (2000) outlined PTSD risk factors including environmental, demographic, prior psychiatric and personality dimensions, cognitive risk factors, biological risks, and genetic risk factors. McFarlane (1997) proposed psychosis-induced PTSD, again pointing to prior psychiatric

illness as a risk factor. Yehuda (1998) pointed to environmental and demographic factors including personality, prior psychiatric illness, dissociation, and cognitive and biological and genetic or family history. In Yehuda's list of risk factors, family history is very relevant to this study, because a majority of the subjects have a family history of exposure to traumatic events.

Prior exposure to traumatic events is reported as being one of the important risk factors (Davidson, Hughes, Blazer, Peterson and George, 1991). Echoing a similar view, Bremner, Southwick, Johnson, Yehuda and Charney, (1993) underlined the importance of childhood exposure as a risk factor. However, Breslau et al. (1999) while agreeing on the importance of the prior traumatic experience, also added that type of trauma is a potent risk factor. Solomon, Mikulincer and Avitzur (1987), and King, King, Foy and Gudanowski (1996) have emphasised family instability and poor social networking as a risk factor. Furthermore, Breslau, Chilcoat, Kessler, Peterson and Lucia (1999) noted the significance of gender, age, socio-economic status and ethnicity may make one more susceptible to PTSD.

McFarlane (1992) noted that when trauma is deliberately produced to cause maximum damage, its impact is greater compared to a natural disaster affecting a larger group. The difference between these two types of traumas is that while victims of a natural disaster attract wider community support, the victims of a man-made disaster may be subjected to judgement. They are also likely to be blamed for triggering or provoking a violent response from perpetrators and may not attract the sympathy attached to victims of a natural

disaster. Furthermore, a natural disaster is unlikely to result in retraumatisation in the form of retribution.

Alcohol and other substance abuse is also a risk factor as it can increase exposure to trauma. Xian, Chantarujikapong, Scherrer, Eisen, Lyons, Goldberg, Tsuang and True (2000) investigated the overlap of these factors in PTSD and substance abuse in 3304 monozygotic and dizygotic male-male twin pair members who were Vietnam veterans. There is a degree of shared genetic vulnerability to both PTSD and alcohol abuser twins. However, there are important environmental factors contributing significantly to the onset of these disorders. These results suggest that PTSD and alcohol abuse have some shared aetiological factors and also have significant genetic and unique environmental contributions in common. McLeod, Koenen, Meyer, Lyons, Eisen, True and Goldberg (2001) looked at these issues in more detail and found that the existence of a shared vulnerability model for the aetiology of PTSD symptoms and alcohol abuse.

However, specific unique environmental factors were more important than genetic factors for PTSD symptoms, and both factors were equally important for alcohol use. They provide a matrix, which suggests that on these criteria there is an aetiological association between exposure to traumatic stress, PTSD and alcohol abuse. This is not a simple relationship but it remains after considering the possible increase of rates of traumatisation because of the association with violence and accidents in heavy drinkers (Kessler, 2000).

These risk factors pointed out above are primary characteristics of the subject population of this study. Aboriginal people are at risk of being exposed to trauma and developing PTSD as the result of environmental, social, economic and historical factors. These form multiple risk factors and lead to continued traumatisation.

3.4.2. Genetic and environmental risks

Genetic or biological vulnerability is not a focus of this study; therefore, it is not a matter for great review. However, the author wishes to note the existence of this model to explain the development of PTSD. Brown and Wolfe (1994) stipulated that both PTSD and substance abuse are multifactorial in aetiology and believed that biological, physiological and environmental variables may have a role. Other studies also found both genetic and environmental influences in the development of PTSD as well as alcohol abuse (Yates, Cadoret, Troughton and Stewart, 1996; Bremner, Southwick, Darnell and Charney, 1996). This explanation has an important significance to this study.

Xian et al. (2000) examined a large group of twins and found that 61.9% of twins with PTSD had alcohol dependence disorder and 24.7% had other drugs dependence. They arrived at the conclusion that there is a genetic influence in the development both PTSD and alcohol abuse. Another study examined the physiological effect of trauma and observed startle eye-blink response in traumatised children as evidence of psychophysiological

abnormality associated with PTSD (Ornitz and Pynoos, 1989). The effect of these on memory and information processing is discussed in Chapter Four.

3.5. Epidemiology

Epidemiological studies in PTSD have concentrated on specific populations – war veterans, soldiers who took part in a particular military mission, refugees, natural disaster victims and victims of small scale but daily occurring traumatic events such as motor vehicle accidents, sexual abuse, domestic violence and other criminal victimisations (Bryant and Harvey, 2002; McFarlane, 1988, 1992, 1998, 2002; Dunmore, Clarke and Ehlers, 2001; Epstein, Fulerton and Ursano, 1998; De Girolamo and McFarlane, 1996; Kulka et al., 1990; Figley, 1978). This is despite an unprecedented increase in the scale of exposure to traumatic events, which can affect larger populations.

Several epidemiological studies have targeted victims of specific events and identified the scale of psychological effect on people encountering traumatic events. For example, Kulka et al. (1990) examined 3016 subjects and found 15% met the diagnostic criteria for PTSD. An earlier study by the Centre for Disease Control Study examined 2490 Vietnam War veterans and 1170 soldiers who were not involved in this war and found that 15% had PTSD after the war. However, only 2.2% were suffering from PTSD at the time of the study.

Yehuda, McFarlane and Shalev (1998) reported that 35% of United States citizens are likely to be exposed to a life threatening traumatic event at least once in their lifetime. This suggests that we have entered an era of unprecedented violence. The schools, playgrounds, family home, neighbourhood, places where we work, streets we walk and the communities we live in are no longer safe places (Jehel et al., 2001) and the impact can be lifelong (Joffe, Broday, Luscombe and Ehrlich, 2003; Janet, 1925). These are turning PTSD into a global epidemic. The September 11, 2001 terrorist attack alone resulted in the death of thousands and has affected millions of people around the world (Yehuda, 2002). Subsequent terrorist attacks and anti-terrorist measures have induced worldwide fear. These attacks in various parts of the world are increasing the number of people with PTSD.

Lee, Isaac and Janca (2002, 633) predicted, "28-35 percent of people exposed to terrorist attacks may develop PTSD". They reported that over 40 percent of people across the USA experienced a significant level of symptoms of stress, putting this group of people at risk of developing PTSD in the event of further exposure to violence. In terrorist attacks elsewhere, 41 percent met the criteria for PTSD at six months, while 34.4 percent continued to meet the criteria at 18 months (Jehel, Buchet, Patereniti et al., 2001).

Another study reported the prevalence of PTSD in the general population (Yehuda, 2002). Prior to the September 11, 2001 terrorist attack, 5 to 6% of men and 10 to 14% of women had PTSD, which made it the fourth most common psychiatric disorder in the United States (Yehuda, 2002). The impact of a traumatic event and the development of PTSD varied according to

the severity of this event. For example, while 55% of rape victims developed PTSD, the rate was 7.5% for subjects involved in motor vehicle accidents (Kessler et al., 1995; Breslau et al., 1999). Kulka et al. (1990), in their study on St. Louis, observed 3.5% for civilians who were exposed to a physical attack and 6.3% for Vietnam War veterans. However, Cottler, Compton, Mager, Spitzangel and Janca (1992) found a lower rate, 1.3% in a similar group of people.

In a US survey of 1,007 randomly sampled subjects aged 21-30, it was found that 39% had lifetime exposures to a traumatic event and PTSD was documented as one of the common psychiatric disorders (Breslau, Davis, Anderski and Peterson, 1991). Lima, Pai, Santacruz and Lozano (1991) studied 500 subjects and found a 42% PTSD rate in subjects exposed to the same event. A study of the Buffalo Creek disaster survivors found a greater rate, 59% lifetime prevalence and 25% met diagnostic criteria of PTSD at the time (Green, Lindy, Grace and Leonard, 1992). A study of rural communities tornado survivors found a similarly high rate of PTSD (Madakasira and O'Brien, 1987).

In contrast, Riggs, Dancu, Gershuny, Greenberg and Foa (1992), Bownes, Ogorman, and Sayers (1991), Dahl (1989) and Burge (1988) studied rape and sexual assault victims and found rates ranging from 25% to 70% lifetime prevalence of PTSD. Studies of former prisoners of war and political prisoners (Basoglu, Paker, Ozmen, Marks, Incesu, Sahin and Sarimurat, 1994; Sutker, Allain and Winstead, 1993; Kuch and Cox, 1992; Mellman, Randolph, Brawman-Mintzer, Flores and Milanese, 1992; Kluznik, Speed, Van-

Valkenburg and McGraw, 1986) found a PTSD rate of 50% to 70%. It indicates the vulnerability of this group to developing PTSD and the severe impact of human engineered traumatic events.

3.5.1. Comorbidity

It has been well reported during the last two decades that PTSD is not the only disorder following exposure to traumatic events (Shalev et al., 1998; McFarlane, 1998, 2002; Kessler et al., 1995; Breslau et al., 1999; Kulka et al., 1990;). Other psychiatric disorders also occur alongside PTSD or alone and are further complicated by alcohol and substance misuse. The latter are mainly in the form of self-medication. Several studies have identified that following exposure to traumatic events although PTSD is uniquely linked, other disorders such depression, various anxiety disorders and amnesia can also occur (Blanchard and Veazey, 2001; Driessen, Meier, Hill, Wetterling, Lange and Junghanns, 2001; George and Krystal, 2000; Andrade, 2000; Maes, 2000; Shalev, Freedman, Peri, Brandes, Sahara, Orr and Pitman, 1998;). Shalev et al. (1998) investigated in Israel, 211 subjects admitted to Hadassah emergency room as a result of exposure to a traumatic event, and found that 68% (141) did not develop any psychiatric conditions in follow-up after four months. Of the remaining subjects, 17% met the diagnostic criteria for PTSD, 14% met diagnostic criteria for major depression and 15% met criteria for other anxiety disorders. This indicates that not everyone develops

PTSD after exposure to traumatic events, while clearly suggesting that PTSD is the psychiatric condition most likely to develop.

Studies of Vietnam veterans have demonstrated high rates of comorbidity (Blow, Cook, Booth, Falcon and Friedman, 1992). Roszel et al. (1991), found that alcohol abuse was the second most coexistent disorder with PTSD occurring in 33% of cases. The Vietnam Veterans Adjustment Study of Kulka et al. (1990) revealed a lifetime PTSD prevalence of 31% among veterans and 73% had a comorbid diagnosis of substance abuse, the most common comorbid disorder.

Another major epidemiological study carried out by the Centre for Disease Control (1988) indicated that 39% of veterans diagnosed with PTSD had a comorbid diagnosis of alcohol abuse or drug dependence. In a disaster population, comorbidity has been examined in three groups. Following the Buffalo Creek disaster (Green et al., 1992) it was found that substance abuse was significantly associated with PTSD, although it only existed in 10% of the subjects. The survivors of the Herald of Free Enterprise ferry disaster (Joseph 2000) there was a significantly increased consumption of a variety of prescribed and non-prescribed medications. By using the General Health Questionnaire and the Impact of Events Scale, he concluded that in general, self-reports of increased substance abuse were associated with higher psychological distress.

In a population of volunteer fire fighters, 30% of those with PTSD shared an increased pattern of drinking in contrast to 9% of that population who did not have PTSD (McFarlane, 1998). The study of Fullilove et al.

(1993) indicated that in a clinic of women drug abusers, 59% suffered from PTSD. A study of 600 homeless men and 300 homeless women in St. Louis (North and Smith, 1992) indicated that PTSD was the most common psychiatric diagnosis among the women, followed by major depression, drug abuse and alcohol abuse.

In general, it appears that there is both a high level of comorbidity of substance abuse in populations who are defined as having PTSD and equally in substance-abusing populations who have high levels of PTSD. This mutual comorbidity implies a significant causal interaction, although there is a variety of other vulnerability factors such as family history, which may contribute to the presence of substance abuse in an individual.

One of the main debates has been whether many of the symptoms in chronic substance abuse are due to the substance abuse rather than the underlying disorder. For example a patient suffering from depression may use alcohol as a means of self-medication. The work of Chilcoat and Breslau (1998) with a longitudinal sample of young adults in Detroit indicates substantial evidence for the self-medication hypothesis rather than the reverse. A variety of different mechanisms for the onset of substance abuse was examined in this population. The conclusion consistently pointed in the direction of self-medication. This is an important issue when examining populations many years after traumatic exposure such as that experienced by Aboriginal people.

3.6. Ethnocultural aspect of PTSD

Culture plays an important role in the construct of trauma as well as in dealing with its effects. It shapes the meaning of trauma, either making it significant or insignificant requiring attention. This is very important, as the effect of trauma is limited to the meaning an individual attaches to it (Bracken, 2001; Young, 1995; McFarlane, 1996; Hough, Canino, Abueg and Dusman, 1996; Cawte, 1976). The meaning and individuals' response, appraisal and adaptation in the aftermath of a traumatic event are influenced and shaped by culture, values, beliefs, norms and society's expectations (Kessler, 2000; Bracken, 1998, 2001; McFarlane, 1996; Bolton and Hill, 1996; Marsella, Friedman, Gerrity and Scurfield, 1996; Dinicola, 1996).

Communities rally behind the victims to fulfil their responsibilities arising from tradition, culture and norms. The importance of culture in shaping responses and establishing a mechanism to deal with trauma and promote healing was summarised by McFarlane (1996):

Culture provides a frame of belief, which assists in dealing with illness and traumatic events as well as their causes. This function has a dimension, which persists and does not disappear with treatment or reconstruction of the damage after a disaster. Traumatic events do have predictable consequences, which are unavailable, although they can be minimised through preparation, training and risk appraisal. Distress, loss and sickness must therefore be managed and adapted to by both individuals and groups. Culture is the vehicle, which embodies the values enriching these processes and the rituals contributing to healing (McFarlane, 1996, 188).

When a traumatic event involves assaults on the culture itself, the impact can be very severe. Attack on culture is attack on the coping and defence mechanisms of victims. This worsens the consequences of trauma.

McFarlane (1996, 188) stated, "Individuals strongly identified with a culture and its values are protected and buffered by the support and sense of identity which it provides, particularly at times of trauma". In the event of a major traumatic event, people bound by a culture respond automatically to manage the crisis, leaving aside any group or/and personal differences, interests and prejudices, and stand together to assist victims of trauma. Culture also sets a standard and guidelines for the process of responses to individuals and groups.

However, culturally adopted standards and guidelines may conflict with or even hinder individuals' ways of response, self-expression, freedom, treatment-seeking behaviour and acceptance of external help. This is where the culture sets itself a challenge - a challenge to provide protection, care and a positive framework aimed at its own development, and the community's sense of security. In addition a culture can in fact promote a certain form of traumatic event and impose silence on its members. For example female genital mutilation, child sexual abuse, rape and physical abuse of women are some of the traumatic events many cultures have failed to address. Such an imposed silence can be detrimental not only to the victim's search for truth, treatment and ability to deal with the impact of the traumatic event, but also to the continued existence of the culture itself. Kirmayer (1996) highlighted how culture can influence the presentation of victims of trauma.

The other issue is the attempt to westernise PTSD. For example, Summerfield (2001) suggested that PTSD is a western concept and its diagnosis does not apply to non-western cultural groups. This concept

ignores the reality of the disorder. Types of traumatic events may differ from culture to culture, mainly influenced by the scale of socio-economic developments (Abueng and Chun, 1996). On the other hand, response to certain forms of trauma may be constrained by culture and norms. However, the core symptoms of PTSD - intrusive thoughts, avoidance and hyperarousal - remain universal.

3.7. Summary

Psychiatric manifestation following exposure to traumatic events was identified in reference to the context in which the event had occurred. Some of the terms include railway spine, shellshock, combat fatigue, etc. It was first recognised by the American Psychiatric Association in 1980 as PTSD. The WHO listed it in its 1992 edition of the International Classification of Diseases. Extensive research in this field during the last two decades also identified that other psychiatric disorders can develop following exposure to a traumatic event.

Nevertheless, PTSD is the only condition having exposure to a traumatic event as prerequisite, while other conditions such as depressive disorders can develop without exposure to traumatic events. Traumatic events are also classified as being beyond normal human experience and distressing to anyone. PTSD is characterised by recurrent, intrusive and distressing recollections of events, nightmares and dissociative flashbacks. The symptoms also include avoiding any external cue that may resemble the

traumatic event, diminished social activities, anger, irritability and difficulty in concentrating. Several writers emphasised the importance of meaning that the victim attaches as a key contributing factor to the development of PTSD. It has been emphasised that the subjective response of the victim – fear, helplessness and horror - determines the outcome of the trauma.

Chapter 4: Theoretical and Philosophical Underpinning

4.1. Introduction

All the famous moralists of old days drew attention to the way in which certain happenings would leave indelible and distressing memories, memories to which the sufferer was continually returning, and which by he was tormented by day and by night (Janet, 1925, 589)

The theoretical and philosophical underpinning of this study is based on Pierre Janet's theory of traumatic memory. Pierre Janet was a French psychiatrist who highlighted the importance of traumatic memory in the development of psychiatric morbidity. In this chapter, society and trauma will be discussed in a general context. Importantly, Janet's theory of traumatic memory will be reviewed in the context of this study. The relevance of the theory of traumatic memory to the Aboriginal people's will be examined.

4.2. Society and trauma

Trauma and development of society are two sides of the one coin. Development is through change and change is driven by conflict. Van der Kolk and McFarlane (1996, 3) summarised the historical relationship of traumatic experience to the development of society: "experiencing trauma is an essential part of being human, history is written in blood". The impact of

this bloody history has never received a fair recognition. One part of society unleashes violence against its fellow citizens and those who are socially and militarily are continuously victimised. Those responsible always have an excuse, being 'provoked'. A classic example is the recent terrorist attacks in various parts of the world and attempts made by terrorist leaders as well as the 'coalition of the willing' to justify their actions.

Some of those subjected to traumatic events overcome their difficulty and lead a normal life while others continue being haunted by their traumatic experience and relive the past. Van der Kolk and McFarlane (1996, 3) summed up that "throughout history, some people have adapted to terrible life events with flexibility and creativity, while others have become fixated on the trauma and gone onto lead traumatised and traumatising existence". Traumatized existence of one generation can impact on the health and wellbeing of the following generation. This is the case with Aboriginal people's traumatic experience and continued traumatisation (Hunter, 1993a, 1996, 1998; Peters, 1995; O'Shane, 1995; Franklin and White, 1991). Even for those who managed to survive and adapt, the trauma shakes up their biological and psychological foundation and significantly impacts on the survivors' social equilibrium (Van der Kolk and McFarlane, 1996). Experience shapes the way humans behave, relate to fellow humans, adapt to the environment and the way one conceptualises and perceives the world. For example, a person brought up in a violent environment and who may never have the opportunity to feel safe may think that violence is a normal social behaviour.

For some individuals, once exposed to a major traumatic event, dealing with memory of trauma is difficult and they may continue to be preoccupied with the past. Following exposure to traumatic events, the ego becomes hardened; the person becomes preoccupied with past experience, working hard to build defence mechanisms. Shapiro (1965, 7) stated, "Earlier conflict is transformed into chronic automatic mode function detached from the content of infantile conflict. Once hardened, character continues to have a protective function. It binds impulses in stable ways, limits flexibility, and constitutes an armour against the external world".

As time passes, some trauma survivors restore their psyche, while others dive into the deep sea of the past. They develop a hardened ego and change their attitude. Pictures of past events form on the memory tape and the person's thinking starts revolving around the traumatic event. The memories of the traumatic event fail to blend with past experience, live independently, and are replayed as a current experience. This in turn prevents the person from dealing with day-to-day reality. People who are exposed to trauma find it difficult to be flexible and adapt to their surroundings. They become fixated with the past and continue fighting past battles. The memory tape that is replayed involuntarily gives the impression that the past still continues to exist.

When this happens, the individual's behavioural and physiological response to the impression is influenced by social and cultural expectations. If the individual is able to adjust to these expectations and the culture is strong enough to promote a safety net, recovery and healing, the process of

dealing with trauma is relatively easy (Van der Kolk and McFarlane, 1996). However, when there is conflict between socio-cultural expectations and the individual's desired way of dealing with the trauma, recovery and healing can be further complicated. This is so especially when there is a culturally imposed silence on certain forms of traumatic experience. This can only make the situation worse for the sufferer. Culturally imposed silence only attempts to shape a physiological and social response in the victim, but cannot assist in dealing with the traumatic memory. The following section explores traumatic memory and its importance to this study.

4.3. Theory of trauma

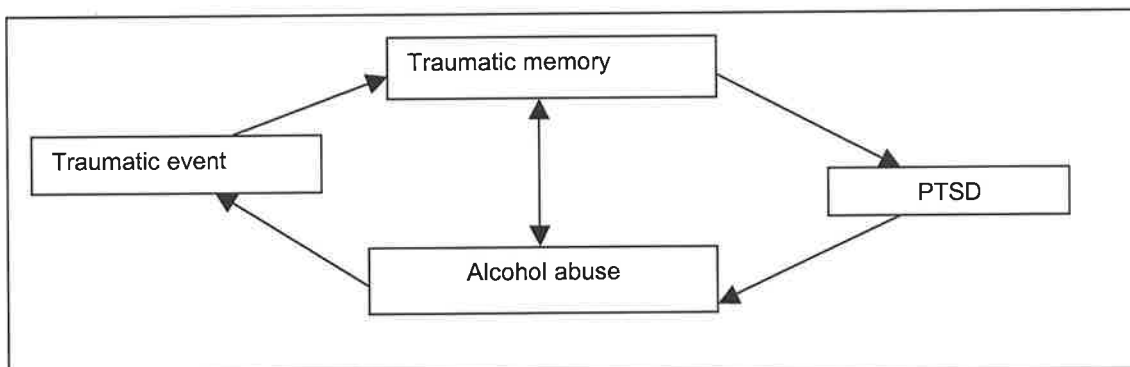
For the development of contemporary theory of trauma Pierre Janet's work during late the 19th and early 20th centuries played important role and lay the foundation for later theories, which are used to explain trauma (Janet, 1901, 1925). Since Janet first explained the link between exposure to traumatic events and development of psychiatric conditions by using traumatic memory as a pathway, several more theories have emerged. These are: traumatic memory model; information processing model; and biological model of traumatic memory.

4.3.1. Traumatic memory model

What is traumatic memory? What is the difference between traumatic memory and memory of trauma? Traumatic memory is the earliest theory that linked exposure to traumatic events to psychiatric conditions, including PTSD (Janet, 1925). The originator of this theory, Pierre Janet (1925) did not define traumatic memory. However, Janet gave detailed information about what constituted traumatic memory (1901, 1925). In this study traumatic memory can be defined as a cluster of unprocessed information related to trauma, which stays separate from pre-existing and processed information. This cluster of information remains independent and represents itself involuntarily as a current. The person loses control over recollection of this memory. This is where it produces intrusive thoughts, hyperarousal and avoidance.

Contemporary cognitive theories are based on Pierre Janet's work on traumatic memory. Diagram 1 illustrates the role of traumatic memory in the development of PTSD, alcohol abuse and retraumatisation.

Diagram 1: Traumatic Memory link to PTSD and Alcohol abuse



Conversely, memory of trauma can be defined as detailed processed information about a particular happening and recollected when it is required. This provides personal analysis of the event where the person reviews what had happened without feeling distressed.

Janet's theory of traumatic memory has played a pivotal role in the development of contemporary theories of trauma. Janet's theory originates from the work of Charcot (1889), who proposed that some events could make a pathogenic impression on the mind of those who were exposed to it (Janet, 1925). Janet believed that an emotion, disquietude and grief resulting from some particular happening could induce many neuropathic disorders. Moreau, de Tour Baillarger and Briquest's insistence upon the pathogenic influence of grief and similar emotions reinforced Janet's belief about the role of traumatic memories in the development of various psychiatric disorders.

In the late 1880s and early 1890s, Janet proposed that certain hysterical symptoms are expressed as bodily modifications connected with the ideas and memories of certain traumatic experience. This was based on Charcot's idea that "we must ascribe considerable importance to the memories left by the accidents, to patients' ideas and disquietudes anent the untoward experience" (Janet, 1925, 590). Janet expanded on this notion and added:

Neuropathic disorders of the same kind might arise in consequence of happenings, which were not accidents in the colloquial sense of the term, which had not caused any obvious material injury, but had simply induced moral perturbation. The memory of what had happened persisted in the same way as the memory of material accident (Janet, 1925, 590).

This notion is particularly relevant to the Aboriginal people's traumatic experience, some of which are not material injuries. For example, loss of land, destruction of culture and forced removal of children were traumatic but the action itself may not have produced a material injury. Many believe these events have caused victims to deeply have ingrained psychological injuries with far reaching consequences.

Pierre Janet proved this notion in a clinical setting, by observing a young woman who suffered from convulsions and delirium every month during menstruation. As described in Janet (1925, 590-591), Marie - a girl of nineteen - suffered every month during menstruation from serious crises, attended by convulsions and delirium, which lasted for several days. Menstruation would begin in normal fashion, but after a few hours the patient would complain of feeling very cold and would have a characteristic shivering fit. Thereupon the menstrual flow would cease and the delirium would begin. In the intervals between these crises, the patient was liable to attacks of terror in which she had a hallucination that there was "a pool of blood before her eyes". She also had a number of stigmata of hysteria, among which may be mentioned "anaesthesia" of the left side of the face with "amaurosis" of the left eye.

The case study/life history of the woman revealed that those symptoms originated from relevant traumatic memory. It was revealed that when she first had menstruation, she checked herself by getting into a cold tub in which she experienced shivering and delirium. She also witnessed an old woman fall down the stairs causing the stairs to be covered with blood. As a child,

she shared a bed with another child whose left side of the face was covered with scabs of impetigo. The patient's symptoms corresponded with those experiences. After observing many cases over the years, Janet concluded that the "traumatic memory must be regarded as an important factor of neurosis" (1925, 593).

Furthermore, Janet (1925, 608) proposed that "traumatic memories, and the tendencies and ideas connected therewith, are extremely distressing to the subject's mind; they jostle against his sensibilities or conflict with his moral ideas". This can disrupt proper information processing – the person may keep replaying the traumatic memory, which may prevent new ideas and experiences from being processed. Following exposure to a traumatic event, survivors experience hyperarousal as a response to the memory disturbance related to trauma. This disrupts information processing on a verbal and symbolic level, preventing memories from integrating with consciousness and keeping it somatically. These memories are replayed as physiological reactions, emotional states and visual images in the form of re-enactments.

4.3.2. Information processing model of traumatic memory

The PTSD as a new research area in the field of mental health has contributed to a diversity of theories and conceptual models in understanding its management and treatment (McFarlane, Yehuda and Clark, 2002; Prigerson, Narayan, Slimack, Beery and Jacobs, 1998). One of the influential models of PTSD is the information-processing model, which was introduced

by Horowitz (1979, 1986). Horowitz's model is strongly linked to Pierre Janet's work and transformed it into contemporary theories of trauma, and has placed a significant emphasis on information processing and cognitive theories of emotion (Peterson et al., 1991). The information processing theory contributed to the development of a personal communication model proposed by Keane (1987), again pointing in the direction of traumatic memory.

Traumatic memory interferes with proper information processing, diminishes decision-making ability and diverts attention away from current events. Horowitz summarised that:

The recurrence of a familiar non-stressful event is likely to be quickly and automatically assimilated. The cognitive processing will be completed, and the information in active memory storage will be rapidly terminated. The information in novel and stressful events, however, cannot be processed rapidly. Thus the point of relative completion is not achieved, and the active memory retention is not terminated, with relevant coding of information remaining in active storage (Horowitz, 1986, 95).

When new information is processed, coded and integrated with existing information, it becomes available for voluntary recollection. Contrarily, when it remains active, it presents as new information and gives the impression that the event is current.

The "new information" results in the disruption of thought processes, which is exhibited in the form of hyperarousal. Van der Kolk and Saporta (1989) proposed that:

Hyperarousal was a response for the memory disturbance that accompany traumatisation: interfering with information processing on a verbal, symbolic level, hyperarousal causes memories to split off from consciousness and to be stored only somatically. Fragments of these visceral memories return later as physiological reactions, emotional states, visual images, or behavioural re-enactments (Van der Kolk and Saporta, 1989, 22).

The appearance of old information as new creates an emergency situation without existence of an emergency. In explaining this effect on the function of the brain, McFarlane et al. (2002, 256) proposed “some neural networks is top-down activation, a process in which dominant or inflexible networks can prime or bias brain activation towards stimuli relevant to certain memories”. This impacts negatively on a person’s ability to appraise the current reality and environment. Any current concerns are dealt with in the context of the past, resulting in neurobiologic malfunction. McFarlane et al. (2002) linked symptoms of PTSD to the process of iterative learning and top-down activation.

4.3.3. Biological model of traumatic memory

It should be noted firstly that it is not the intention of this study to examine the results of CT Scan or X-ray or any other laboratory test results to explain the biological effect of trauma. However, it is worth noting that recent studies have observed change in brain physiology and function following exposure to traumatic events (Lieberzon, Taylor and Amdur, 1999). A review of the biological model may explain why some people develop PTSD while others do not after exposure to trauma (McFarlane et al., 2002).

Alterations in brain structure and function have been noted in PTSD sufferers. Yehuda (2002) reported increased circulating levels of norepinephrine and increased activities of alpha2-adrenergic receptors.

Furthermore, Lieberzon et al. (1999) highlighted structure - amygdala and hippocampus - change in the brains of patients with PTSD. Behavioural alteration is a reflection of the individual's perception and response to environmental and physiological factors. In this case the symptoms of PTSD are a manifestation of alteration in brain structure, which produces physiological responses.

McFarlane et al. (2002) further proposed that the pathway to the exacerbation of PTSD symptoms indicates a change in neural networks as a result of "pruning" and "top-down activations". Further linking traumatic memory to the biological model, McFarlane et al. (2002) attribute the individual's impairment of cognitive and affective adaptability to the dominance of internal memories.

4.4. Relevance of theory of traumatic memory to Aboriginal people's experience

What is the relevance of theory of traumatic memory to Aboriginal people's experience and mental health? For Aboriginal Australians who were born to traumatised parents, in traumatised communities, brought up and lived a traumatised life, most probably for their entire life, the memory tape is full of traumatic events. Involuntary replay of the tape can produce an ongoing psychological and emotional emergency. This is because the replay of memory poses both the internal and external environment as imminently dangerous. Janet (1925) believed that a response to a traumatic event accounted for the ongoing emergency reaction to subsequent stresses.

The experience of one traumatic event could lead to over-reaction and intense emotional response to a subsequent stressful event. Depending on an individual's coping ability and support network, the first event can leave a permanent inner scar and steal the person's emotional strength and physiological security. Kolb and Multipassi (1982) emphasised that "traumatised individuals are likely to fail physically and emotionally with their problems because of sense of inner insecurity. In losing control over their bodily functions, they are not the competent people as they were before". Aboriginal people who have been subjected to continuous traumatic events have lost their psychological and physiological strength:

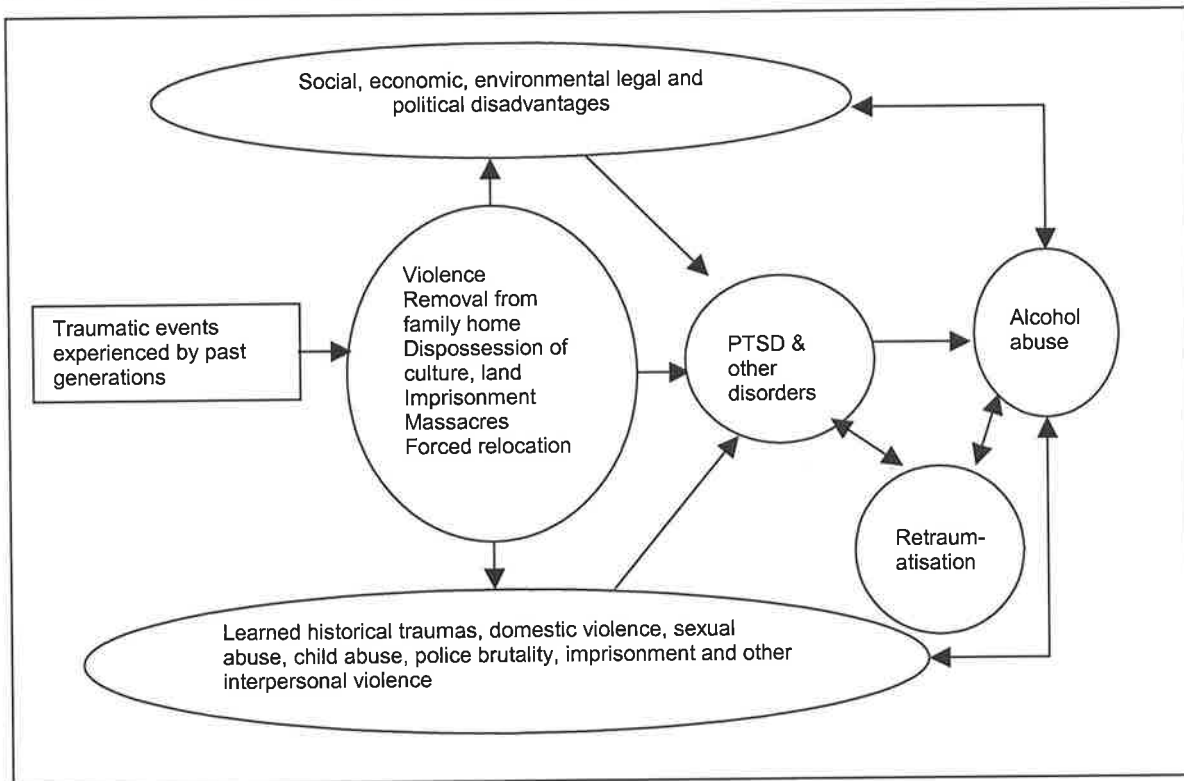
A stimulus impinging on the mind can be conceived as behaving like a ... raindrop landing on a terrain of hill and valleys. The drop moves generally downhill until it ends up at the bottom of a nearby valley. The deeper the memory basin and the steeper the memory walls, the more likely the terrain of associations is likely to end up in it. In PTSD the traumatic event may be conceptualised as occupying... a Dead Sea of memory, into which all of the patient's associations inexorably flow (Tank and Hopfield, 1987, 106).

This is evident in Aboriginal people's history. An Aboriginal person's traumatic memory basin is deeper, and contains traumatic experiences of one's great-grandparents, grand-parents, parents and community. For example, an Aboriginal person may recall the history of his/her grandparents' traumatic experiences, then his/her parents' and connect those with that of his/her own traumatic experience. Personal traumatic experience is a likely reminder of the trauma of past generations.

Aboriginal people's traumatic experience is complex and multi-factorial. It is not a mere reflection of the individual experience of traumatic events, but

a combination of past and present generations' exposure to trauma and continued traumatising. Diagram 2 illustrates this assumption.

Diagram 2: Conceptual Model of Transgenerational Trauma and retraumatisation



As presented in the above diagram, the subject is heavily engaged with past experiences - not only with one's own experience, but also that of his/her parents', grandparents' and great-grandparents' traumatic experiences. Memories of the past are revived in the context of current traumatic experience. To suppress the memory, the person engages in alcohol abuse as self-medication, which leads to further traumatising.

When the situation gets out of personal control, the person loses confidence and trust in one's self and others. He/she would see danger

everywhere in internal and external environments. Van der Kolk, McFarlane and Hart (1996) stated:

People with PTSD experience their internal world as a danger zone that is filled with trauma-related thoughts and feelings. They seem to spend their energy on not thinking and planning. This avoidance of emotional triggers further diminishes the importance of current reality, and, paradoxically, increases their attachment to the past (Van der Kolk et al., 1996, 419).

The personal meaning of the traumatic experience involves working overtime trying to comprehend the impact of trauma, and often includes feelings of irritable loss, anger, betrayal and helplessness. It becomes incomprehensible when a traumatic event is repeated. Exposure to multiple events complicates the recovery process:

One of serious complications that interferes with healing is that one particular event that activate other, long-forgotten memories of previous traumas, and create a domino effect: A person who was not previously bothered by intrusive and distressing memories may, after exposure to yet another traumatic event, develop such memories of earlier experiences (Van der Kolk and McFarlane, 1996, 9-10).

This is a daily experience of Aboriginal people. For example, an Aboriginal person who encounters a minor stressful event may see it in the context of the past experience instead of dealing with current issue. This is because the past experience has changed their personality and the new event they encounter symbolised the past, an external cue of trauma:

Despite the human capacity to survive and adapt, traumatic experiences can alter people's psychological, biological, and social equilibrium to such a degree that the memory of the one particular event comes to taint all other experiences, spoiling appreciation of the present. This tyranny of the past interferes with the ability to pay attention to both new and familiar situations. When people come to concentrate selectively on reminders of their past, life tends to become colorless, and contemporary experience ceases to be a teacher (Van der Kolk and McFarlane, 1996, 4).

Aboriginal people's ability to deal with current issues is limited or literally taken over by the tyranny of past experiences.

Anyone who was exposed to a trauma executed systematically and left unacknowledged and unaddressed is fixated with the past, and may continue fighting past battles, only to find the inner wound bleeding again and again. This is where the difficulty of understanding Aboriginal people's trauma lies. For Aboriginal people, loss of land, removal of children from their parents, being herded onto reserves and missions and being denied basic rights including denial of citizenship in one's own country, carry a significant emotional burden.

4.5. Conclusion

Exploration of the theory of traumatic memory revealed that past experience could continue to live and influence an individual's psychosocial equilibrium once exposed to traumatic events. In the late 19th and early 20th centuries, Pierre Janet explored the origins of symptoms of some psychiatric conditions. Case studies of patients revealed that some symptoms were directly linked to traumatic experiences. As this evidence was repeated in clinical settings, Janet concluded that traumatic memory plays an important role in the development of a psychiatric condition. His work laid the foundations for the theory of Posttraumatic Stress Disorder.

Chapter 5: Methodology

5.1. Introduction

In this chapter, methodology - the instrument used to collect the relevant data, target population and its profile, access to the population and sample selection methods - will be described. Choice of instrument and its administration, pilot study and data analysis will be outlined. Ethical considerations and implications of the findings will be pointed out.

5.2. Methods

Semi-structured clinical interview and survey questionnaires were used to collect quantitative data. Since the recognition of PTSD as a psychiatric disorder in DSM-III (APA, 1980), developing a reliable data collection tool has been the focus of researchers in the field. Taking into account the diagnostic criteria described in DSM-IV and ICD-10, several structured and semi-structured interviews, and self-report tools have been developed. Many researchers in the field of trauma studies recommend structured and semi-structured interviews as a better method to elicit information about trauma and capture PTSD symptoms (Newman, Kaloupek and Keane, 1996; Weiss, 1993). Comprehensive and broadly designed instruments with a focus on

eliciting a full picture of the events and their impact on victims can provide vital information to establish the prevalence of PTSD (Newman et al., 1996).

Structured and semi-structured interview methods are sufficiently flexible to be applied in the context of individual traumatic events (Newman et al., 1996; Weiss, 1993). To utilise the structured clinical interview technique, the interviewer needs to possess advanced clinical knowledge and assessment skills in psychiatric disorders. Of particular importance is specific knowledge and clinical skills in the field of study. If the interviewer has the required knowledge and skills, a structured clinical interview “can insure coverage of all relevant signs and symptoms of PTSD” (Weiss, 1993). Therefore, the quantitative method was used and structured clinical interview and survey questionnaires were chosen to collect data. The following section provides an overview of the instrument.

5.2.1. Instrument

Due to the absence of similar previous studies, finding a familiar instrument for data collection failed to yield tangible results. This was partly due to the complex problems experienced by the subject population as well. Following an extensive search and literature review, the choice was to use a number of instruments.

The Composite International Diagnostic Interview (CIDI Auto Version 2.1) was identified as having a potential application in the subject communities. A pitfall of the CIDI is that the PTSD section’s ability to capture

longstanding trauma of this culturally distinct population was of concern; it was necessary to develop specific measures to elucidate the complex traumatic experiences of Aboriginal people. The Indigenous Trauma Profile (ITP) was developed using evidences from literature. In addition, the Impact of Events Scale (IES) and Alcohol Use Disorder Identification Test (AUDIT) were also adapted to supplement the CIDI. The author also hopes that applying a variety of instruments will have additional benefit in identifying suitable instruments for further research in this area.

5.2.1.1. Composite International Diagnostic Interview

The Division of Mental Health of the World Health Organisation (WHO) developed the Composite International Diagnostic Interview (CIDI), for clinicians to apply in community settings (Peters, Andrews, Cottler, Chatterji, Janca and Smeets, 1996; WHO, 1997). It has been used by health professionals in community samples (Newman et al., 1996; Robins, Wing, Wittchen, Helzer, Babor, Burke, Farmer, Jablensky, Pickens, Reiger, Sartorius and Twole, 1988) and is the instrument of choice for this study. It was also used in Germany, The Netherlands, Australia and Canada (Kruse, Schmitz and Thefeld, 2003; De Graaf, Bijl, Smit, Vollebergh and Spijker, 2002; Andrews, Henderson and Hall, 2001; Hofstra, Van der Ende and Verhulst, 2001). Personal communication with Professor McFarlane, an expert in this field, confirmed that the CIDI was also used in Kuwait and Lebanon.

The CIDI was used in ICD-10 and DSM-IV to identify PTSD diagnostic criteria (Peters et al., 1996) and performs adequately in differing cultural settings. This was one of the key factors leading to the use of CIDI in this study. The CIDI package contains diagnostic sections for various psychiatric conditions, including alcohol abuse. Those sections to be used in this study include Profile, Anxiety disorders, Depression, Alcohol, Drug abuse and PTSD (Appendix A). The CIDI will be administered using the current and lifetime diagnosis format. This methodology dates the onset and offset of the disorder.

5.2.1.2. The Impact of Events Scale

The Impact of Events Scale (IES) was developed well before the listing of PTSD in DSM-III in 1980 (Horowitz, Wilner and Alvarez, 1979). However, it captures all the essential elements of trauma and its impact and has been crucial in the assessment of PTSD (Joseph, 2000). Most importantly, the instrument is relevant to this study as it was developed taking into account the Horowitz's theory of information process.

The instrument measures the key PTSD symptoms of intrusion, avoidance and hypervigilance. The IES has 22 short questions to be answered by circling one of the options indicating the severity of the symptoms. The scaling is: 0 = not at all, 1 = a little bit, 2 = moderately, 3 = quite a bit, and 4 = extremely (Appendix B).

5.2.1.3. Alcohol Use Disorders Identification Test

The Alcohol Use Disorders Identification Test (AUDIT) questionnaire is specifically aimed at collecting data about the subject's alcohol consumption. Bush, Kivlahan, McDonell, Fihn and Bradley (1998) found that AUDIT has good psychometric qualities. The instrument has ten short questions to be completed by participants (Appendix C).

5.2.1.4. Indigenous Trauma Profile

The Indigenous Trauma Profile (ITP) was developed for the purpose of this study to address the concern that CIDI may not elicit all the traumatic events experienced by Aboriginal people. It was designed to capture specific traumatic experiences such as removal of children, destruction of culture and police brutality, which may not be covered by CIDI.

The ITP has 33 items in which a respondent ticks 'yes' or 'no' at the end of the statement (Appendix D). Variables were identified from literature relating to Aboriginal people's traumatic experience (Hunter, 1995a, 1995b, 1996, 1997, 1998a; Peters, 1995; O'Shane, 1995; Horton, 1994, Franklin and White, 1991; Stanner, 1979; Stone, 1974). While it contains most of the major traumatic events reported in the literature, it is also easy for subjects to understand.

5.2.2. Validity, reliability and applicability

The validity and reliability of CIDI, IES and AUDIT have been established in research on various groups in culturally diverse communities. The validity, reliability and linguistic and semantic, cross-cultural conceptual and content equivalence of CIDI have been established via numerous studies conducted on various cultural groups during field trials (Keane, Kaloupek and Weathers, 1996). It has been utilised in a variety of trauma populations including earthquake survivors, war veterans and civilian war victims (Keane et al., 1996). Stressors examined during the trial of CIDI include: "direct combat; physical assault or attack; rape; sexual assault, or incest; terrorism, kidnapping; seeing someone being seriously injured or killed; [and] serious threat or harm to close relatives or friends" (Peters et. al., 1996, 169). Most of the above traumatic events are relevant to the experiences of Aboriginal people. Therefore, CIDI is the choice of instrument to elucidate relevant data from the proposed subject.

The Impact of Events Scale also has been used in several studies involving combat veterans, assault victims, motor vehicle accident survivors, fire fighters and victims of natural disasters (Green et al., 1992). Another study also proved the reliability of internal consistency and validity/test-retest reliability (Keane, King and King, 1996). The AUDIT also has proven reliability and validity. Hall (1996) found that AUDIT was a reliable instrument in identifying alcohol-related disorders and comorbidity. Bush et al. (1998) praised the psychometric quality of AUDIT in an alcohol abusing population.

5.3. Pilot study

There is no evidence of any study previously using CIDI, IES and AUDIT in the Aboriginal population. Despite these instruments' background of proven validity and reliability, a pilot study was necessary and conducted to ensure that they are applicable and acceptable to this group of people. The result identified some associated problems: the time required to administer the instrument that was far beyond the participants' concentration span; repeated questions; which irritated participants very easily; and some of the questions were not relevant to the participants' experience and environment, especially regarding anxiety. Only six out of ten participants completed the interview. Of these, two were visibly not happy with the whole procedure.

In addition, some sections of CIDI were irrelevant to the current study, while others were culturally inappropriate and proved difficult to use. On the basis of the findings from the pilot study the most applicable and relevant sections of the CIDI were selected. These were anxiety disorders, depression, alcohol, PTSD and drugs modules.

Both IES and AUDIT were found to be easy as the questions are short and participants did not experience difficulty in ticking boxes. Nine out of ten participants did not have any problems with IES while eight out of ten participants understood the questions listed in AUDIT and ticked an appropriate box.

The Indigenous Trauma Profile (ITP), as pointed out above, was developed specifically for this study. As with all other instruments used in the

study, it was tested on ten similar subjects. As it is realistic and contains the list of traumatic events reported as having happened to Aboriginal people, the content was easy to understand and respond to. Initially, it was designed with the instruction "tick if applicable to you". On the basis of feedback from participants, a few questions were modified to ensure cultural sensitivity and appropriateness. Yes and No columns were added at the end of each statement.

5.4. Administration procedure

Aboriginal Australians aged 18 to 65 years who reside in the Central West region of Western Australia were the subjects of this study. Interviews were conducted in an environment where the subjects felt comfortable. This was also a part of maintaining confidentiality, as going to a designated centre may easily expose subjects to unpleasant attention. Each subject was visited at home and given written information explaining the aim of the study.

For subjects who may not read English, a local Aboriginal Health Worker read the explanatory note and discussed the aim of the study. Following this explanation, if the subject consented to participate in the study, he/she was given survey questionnaires containing IES, AUDIT and ITP. Most of the subjects were able to complete to complete AUDIT, IES and ITP survey questionnaires. A few required assistance to complete them. Following completion of the survey questionnaire, CIDI was administered on the spot or an appointment was for a more convenient time.

5.5. Ethical considerations

Careful consideration was given to avoid any item that may lead to the identification of participants in the report and related publications of this study. Prior to administering the instrument, participants were given detailed information about the study (Appendix E). The subject was informed that there is no obligation to participate in the study and that he/she can withdraw at any time without advance notice. Prior to commencement of the interview, subjects were asked to sign a consent form (Appendix F). All data were deidentified when entered into the computer.

5.5.1. Community consultation and consent

As a part of the research ethics standard requirement for any research on an Aboriginal community, this study was given community-wide consent following extensive consultation. Every community organisation and its leaders were given information about the proposed study and asked to give their individual and organisational approval (Appendix G).

Community support was required by the University of Adelaide Ethics Committee and Western Australian Aboriginal Health Information and Ethics Committee (WAAHIEC), before approval of this study could be granted. Following lengthy consultation the study received community consent from all relevant organisations and community leaders (Appendix H).

When the above prerequisites were fulfilled, the same committee of the University of Adelaide granted ethical clearance. After ensuring the appropriateness of this study to Aboriginal culture and interest, approval was obtained from WAAHIEC (Appendix I).

5.5.2. Contingency plan

As a recollection of some traumatic experiences may be distressing and capable of causing some form of psychological disturbance, the researcher and local Aboriginal Health Worker were prepared to provide counselling to participants immediately after completion of the interview. Those who opted not to attend post-interview counselling were also given further information that they can seek counselling from the team within the following two days.

5.6. Target population

The author spent some time in remote communities in the Central West region of Western Australia and observed the predicament of those communities. Observation of high level of alcohol consumption, violence and adolescent crime raised the need to conduct research into the underlying factors. Central West Health Region includes the health districts of Murchison, Midwest and Geraldton. This study involves two of the three districts, Murchison and Midwest. The Aboriginal population of Murchison

was 821 (410 males and 411 females), 17.7% of the total population of Murchison, which was 4,626 in 1998. The Midwest population was 14,194 in 1998 and Aboriginal Australians accounted for a total of 1727 (870 males and 857 females), i.e. 12.2% of the population. Combined, the two towns' study population was 678 (Lin, 1999; Health Department of Western Australia, 1999). Adults between the ages of 18 and 65 were selected as potential subjects. The author worked in these communities and had positive preliminary discussions with the elders in the region before proceeding with the study. Two towns and their surrounding communities were selected for this study. The names of these towns are suppressed in order to protect their reputation.

5.6.1. Selection of these communities

A number of issues facilitated the decision to carry out the study on these communities. The researcher's employment prior to commencing the study resulted in the development of a working relationship between the researcher and the community. During this time the observed high level of alcohol abuse, violence and visible socio-economic disadvantages feeding retraumatisation also played an important role in deciding to undertake research in these communities. The relationship between the researcher and the community leaders, which was important to gain access to subjects, was also a key factor in targeting these communities.

5.6.2. Access to target population and sample selection procedure

The Aboriginal Medical Services of the region, ATSIIC branch representatives, local elders and influential community figures were approached and the proposed study was explained to them. Aboriginal health workers covering these towns indicated their interest to participate in the study. That support was important in accessing the target population.

All Aboriginal households were surveyed by door knocking. The local health workers who were able to identify every Aboriginal person in the town identified Aboriginal households. Aboriginal people aged between 18-65 were eligible to participate in the study.

5.6.3. Inclusion and exclusion criteria

To participate in this study Aboriginality was the essential criterion. Identifying Aboriginality was easily achieved through the Health Worker who knows Aboriginal people in the town. Individuals with cognitive impairment, severe physical illness causing current symptoms or were intoxicated at the time of interview were excluded. Those individuals who were under 18 and over 65 years of age were excluded from participating in the study. Non-Aboriginal people were excluded from participating in this study regardless of marital or any other relationship to an Aboriginal person.

5.7. Data analysis

Data were analysed by using Statistical Package for the Social Sciences (SPSS). Descriptive and correlational statistics were used. Multivariate and chi-square analysis was applied to determine any significant differences between subgroups according to the characteristics of the variables. The lifetime method allowed the recording of the onset of various identified disorders and their relationship in time with the traumatic events experienced. The relationship between levels of alcohol consumption and the various diagnoses were compared using logistic regression. Comparative analysis was carried out between the rates from this sample and the ABS Mental Health and Wellbeing Survey (ABS, 2000).

5.8. Findings

The report of the study is available to all mental health professionals, the Health Department and Aboriginal Medical Services. For wider accessibility by the academic, professional and general communities, the findings of this study will be published in relevant journals. Key stakeholders will be provided with a copy of the report upon request. The author also returned to the region to present the findings to local community organisations and Aboriginal people.

5.9. Implications of the study

Literature search suggests that there has been no epidemiological study undertaken to measure the incidence of PTSD and its relationship to alcohol abuse among Aboriginal Australians. As a result of this, mental health professionals' understanding of Aboriginal mental health is somewhat superficial. The approach to mental health problems is therefore often poorly directed, concentrating on reducing symptoms rather than the underlying factors. The findings of this study may help service providers to develop a broad proactive strategy addressing the issue of substance abuse, accidents and violence in Aboriginal communities, bearing in mind that PTSD is a mediating factor. While it is recognised that the data in this study were drawn from only a small proportion of the Aboriginal population, the general patterns ascertained in here are likely to apply to similar populations across Australia.

Therefore, the findings have significant implications for the development of future mental health policies and professional service delivery. The findings of the study are expected to provide a greater understanding of Aboriginal mental health issues and their relationship to past trauma and ongoing traumatisation. Therefore, it has significant social policy implications at State and Federal levels.

5.10. Limitations of the study

The study was confined to small communities in the Central West region of Western Australia. The major contributing factors to the limitation of the study include limited financial and human resources. Additional reasons include the complicated bureaucratic process in obtaining Ethics Committee approval from each state within a reasonable timeframe. The need to arrange and maintain a relationship with Aboriginal leaders, organisations and communities is demanding. It was beyond the scope of this study to target subjects under the age of 18 and over 65 years. In summary, it is very difficult to gain access to such communities and this study was possible only because of the unique relationship between the author and study population.

Another limitation is associated with instruments. As discussed in Chapter 1 as well as in this chapter, the author was unable to identify a previous study in this specific field, which would have had the benefit of finding an acceptable instrument. Following consultation with experts in the field of trauma, the author had no alternative but use the available instruments. The CIDI, IES and AUDIT were chosen taking into account their cultural limitations. In recognition of the CIDI's limitation, ITP was developed to cover the gap and produced very good results. However, the ITP itself is new and it was anticipated that there would be more to be learned about further use of this instrument.

Chapter 6: Results

6.1. Introduction

This chapter presents and comments on the findings of the study. Demographic characteristics including age, gender, marital status, educational background and employment status of subjects are reported. Key findings with epidemiological and clinical significance are: identification of types traumatic events experienced by subjects, rates of exposure, prevalence of PTSD, and rates alcohol abuse and dependence. The study has established prevalence major depressive disorders, general anxiety disorder, specific phobia, social phobia and agoraphobia. These findings are reported in this chapter. Statistical analysis including correlation and comparisons will be presented.

6.2. Demographic characteristics

For confidentiality reasons, this study deliberately avoided identifying the subjects' tribal background. The two towns are located in Murchison health district of the Central West Region, in Western Australia. Of the target population (18 to 65 years old), a total of 8 people did not participate in the study. Of this group, five did not do so due to unspecified personal reasons;

one could not due to the urge to drink. A man in his late 20s could not participate in the study because of his urge to drink. He stated, "If I sit with you for interview, I will miss out from beer." His presentation showed that he had already consumed a significant amount of alcohol. The time was 11am. Two people walked out of the interview. Overall, 96.5% (n=221) of the total towns' population aged between 18 to 65 years old participated in the study. This was comprised of 47% (n= 104) male and 53% (n=117) female.

6.2.1. Age group of subjects

Age distribution of subjects indicates that people as young as 18 and as old as 65 years of age took part in the study. The group aged 26 to 35 is the largest, 37% (n=82) followed by the 18 to 25 age group, which is 24% (n=53). Table 2 presents age in the form of group rather than specific age. The average age is 38.

Table 2: Age distribution of participants

Age Group	Frequency	Percent
18 – 25 years old	53	24%
26 – 35 years old	82	37%
36 – 45 years old	44	20%
46 – 55 years old	30	14%
56 – 65 years old	12	5.4%

6.2.2. Marital status

The marital status of the subjects varied in classification: single; married; de-facto; separated; divorced; and widowed. The majority of

subjects, 46.2% (n=102) were identified as being in a de facto relationship. This is the largest group in the marital status distribution followed by 23.5% (n=52) who were identified as single. Details are presented in Table 3.

Table 3: Marital status

Marital Status	Frequency	Percent
Married	21	9.5%
De Facto	102	46.2%
Single	52	23.5%
Separated	9	4.1%
Divorced	7	3.2%
Widowed	30	13.6%
Total	221	100.0

6.2.3. Educational background

Poor education outcomes in Aboriginal communities in remote towns are well reflected in the demographic characteristics of the study population. While the majority, 84.2% (n=186) did not have any qualifications, 13.6% (n=30) of subjects had achieved certificate level. The minority, 1.8% (n=4) had completed a diploma. Table 4 presents the breakdown of educational levels achieved by participants.

Table 4: Qualifications

Qualifications	Frequency	Percent
Certificate	30	13.6%
Advanced Certificate	1	.5%
Diploma	4	1.8%
No qualification	186	84.2%
Total	221	100.0%

Education has a major role in terms of obtaining employment, access to improved social relationships, and opportunities for networking. Poor education outcomes indicate socio-economic disadvantage and increased risk of exposure to traumatic events and subsequent development of PTSD.

6.2.4. Employment status

Poor education translates into a high rate of unemployment rate for this population. The profile of subjects reflects the economic disadvantages suffered by Aboriginal people. Table 5 presents the employment status of subjects.

Table 5: Employment Status

Employment Status	Frequency	Percent
Unemployed	120	54.29%
Pension	35	15.83%
Part-time	29	13.12%
Full-time	18	8.14%
Casual	17	7.69%
Workers Compensation	1	0.5%
Total	221	100.0

A total of 71.5% of the study population were unemployed. Furthermore, for those who are employed, their employment includes the CDEP programs. Therefore, the real employment rate is much less than what the subjects reported as employment. This has significant ramifications for exposure to traumatic events, development of PTSD and alcohol abuse.

6.3. Key findings

Types of traumatic events experienced by Aboriginal people, rate of exposure, prevalence of PTSD, other psychiatric disorders, alcohol abuse and its effect, and other substances abuse have been identified. Some traumatic events are specific to Aboriginal people, equivalent to what is referred as a “culturally bound syndrome”, while others are universal traumatic events such as violence, sexual assault and child abuse. The traumatic events listed in ITP contained events, which are divided into three categories: primary traumatic events, which are directly experienced traumas; secondary traumatic events, which are witnessed traumas; and learned traumatic events, which include historical traumas and learned or informed traumatic events.

6.3.1. Primary traumatic exposure

In the group of primary traumatic events, which are directly experienced traumas, being threatened with and without a weapon were experienced by 55.2% (n=122) and 52.5% (n=116) respectively. Injury from violence was experienced by 40.7% (n=90) and police brutality was reported by 28.5% (n=63) of subjects. Injury resulting from motor vehicle accidents was reported by 13.1% (n=29) of subjects and domestic violence was experienced by 43% (n=95). Regarding childhood trauma, 27.6% (n=61) of subjects experienced physical abuse and 16.3% (n=36) were sexually

abused. Furthermore, 8.6% (n=19) indicated that they were removed from their biological parents when they were children. Details are presented in Table 6.

6.3.2. Secondary traumatic exposure: witnessed traumas

In the group of subjects who reported experiencing secondary exposure to traumatic events, 41.2% (n=91) reported witnessing someone being attacked and 25.3% (n=56) reported being distressed by another person's suicidal thoughts or suicide attempt. Domestic violence was witnessed by 44.3% (n=98) of subjects. These figures must be read in the context of the close relationship within the population. This means that many people may witness one traumatic event; therefore, the figure showing subjects who witnessed the trauma of others may not necessarily reflect the frequency of events.

6.3.3. Historical and learned traumatic events

In the category of historical and learned traumatic events, being informed of the 'destruction of Aboriginal culture', 'dispossession of land' 'siblings were mistreated' and 'subjected to relentless racism' were reported by 82.8% (n=183), 84.2% (n=186), 74.7% (n=165) and 77.7% (n=171) of subjects respectively. These events are summarised in Table 6.

Table 6: Traumatic events and exposure rate (ITP results)

Traumatic Events	Frequency	Percent
Learned about dispossession of land	186	84.2%
Learned about destruction of Aboriginal culture	183	82.8%
Subjected to relentless racism	171	77.4%
Learned siblings were mistreated	165	74.7%
Learned relatives were brutalised by police	161	72.9%
Threatened without weapon	122	55.2%
Threatened with weapon	116	52.5%
Witnessed domestic violence	98	44.3%
Subjected to domestic violence	95	43.0%
Witnessed someone being attacked	91	41.2%
Learned a relative died from violence	91	41.2%
Injured from violence	90	40.7%
Witnessed someone badly injured	81	36.7%
Threatened by police	75	33.9%
Police brutality during arrest	63	28.5%
Physical abuse as a child	61	27.6%
Witnessed suicide or attempted suicide	56	25.3%
Assaulted in police cell	55	24.9%
Sexual assault/rape as an adult	47	21.3%
Sexual assault as a child	36	16.3%
Injured from MVA	29	13.1%
Assaulted by fellow prisoner	26	12.7%
Taken away from parents	19	8.6%
Sibling removed	12	5.4%
One parent was removed	18	8.15%
Kidnapped	13	5.95%
Denied access to your child	7	3.2%
Both parents were removed	6	2.7%
Your child was taken away from you	4	1.8%
Tortured	2	0.9%

In the category of historical and learned traumatic events, 72.9% (n=161) reported hearing that their relatives were brutalised by police and 41.2% (n=91) reported learning about the death of a relative from violence. A high level of preoccupation with inherited traumas shows the level of information that is being passed on to the young generation.

6.3.4. Worst traumatic events

In ITP subjects were given the opportunity to indicate three worst traumatic events. A total of 43.9% (n=97) reported worst event one, 58.4% (n=129) were able to identify worst event two and 59.7% (n=132) indicated worst event three. It should be noted that all subjects who reported traumatic encounters have reported multiple exposure and chose not to go through the long list of traumatic events to nominate the top three events. As the total figure in Tables 7, 8 and 9 below shows, less than half of the subjects nominated top three traumatic events.

Table 7: Worst events 1 (ITP result)

Traumatic Events	Frequency	Percent
Police brutality when arrested	31	14.0%
Physically abused as a child	14	6.3%
Learned relatives subjected police brutality	9	4.1%
Sexual assault/rape as an adult	9	4.1%
Sexual abuse as a child	5	2.3%
Learned/informed close relative died violently	5	2.3%
Learned that Aboriginal people were dispossessed of their land	4	1.8%
Subjected to domestic violence	3	1.4%
Threatened with weapon	2	0.9%
Witnessed someone badly injured	2	0.9%
Sibling was taken away by government	2	0.9%
One parent was taken away	2	0.9%
Injured from violence	2	0.9%
Taken away from parents	1	0.5%
Assaulted in police cell	1	0.5%
Threatened without weapon	1	0.5%
Injured from motor vehicle accident	1	0.5%
Found a dead body	1	0.5%
Learned about destruction of Aboriginal culture	1	0.5%
Siblings were mistreated	1	0.5%
Total	97	43.9%

The most commonly experienced worst traumatic event in category one happened to be 'police brutality' 14.03% (n=31), followed by physical

abuse as a child. In the list of worst event number two 'police brutality' remained on top of the list followed by child sexual abuse and rape as an adult. In the number three worst events list 'police brutality' continued to dominate, followed by rape.

Table 8: Worst events 2 (ITP result)

Traumatic Events	Frequency	Percent
Assaulted in police cell	26	11.8%
Sexual abuse as a child	12	5.4%
Learned about destruction of Aboriginal culture	11	5.0%
Threatened by police	3	1.4%
Threatened with weapon	6	2.7%
Sexual assault/rape as an adult	5	2.3%
Domestic violence	4	1.8%
Threatened without weapon	3	1.4%
Learned that Aboriginal people were dispossessed of their land	3	1.4%
Witnessed someone badly attacked	2	0.9%
Witnessed domestic violence	2	0.9%
Learned/informed that close relative died violently	2	0.9%
Police brutality when arrested	2	0.9%
Sibling was mistreated	2	0.9%
Sibling was taken away by government	1	0.5%
One parent was taken away	1	0.5%
Physically abused as a child	1	0.5%
Injured from violence	1	0.5%
Injured from motor vehicle accident	1	0.5%
Witnessed someone badly injured	1	0.5%
Witnessed suicide or suicide attempt	1	0.5%
Found a dead body	1	0.5%
Subjected to relentless racism	1	0.5%
Total	92	41.6%

In the group of worst traumatic events number three; 'police brutality' remained on the top of the list followed by 'dispossession of land'. Interestingly, sexual abuse took the third place in this category of traumatic events. Being 'subjected to relentless racism' stood at the forth place. Details are in Table 9.

Table 9: Worst events 3 (ITP results)

Traumatic Events	Frequency	Percent
Threatened by police	26	11.8%
Learned that Aboriginal people were dispossessed of their land	13	5.9%
Sexual assault/rape as an adult	11	5.0%
Subjected to relentless racism	10	4.5%
Subjected to domestic violence	4	1.8%
Threatened with weapon	3	1.4%
Learned/informed close relative died violently	3	1.4%
Threatened without weapon	2	0.9%
Injured from violence	2	0.9%
Tortured	2	0.9%
Witnessed suicide or suicide attempt	2	0.9%
One parent was taken away	2	0.9%
Assaulted in police cell	2	0.9%
Witnessed domestic violence	1	0.5%
Police brutality when arrested	1	0.5%
Physically abused as a child	1	0.5%
Sexual abuse as a child	1	0.5%
Learned that relatives were subjected to police brutality	1	0.5%
Learned about destruction of Aboriginal culture	1	0.5%
Sibling was mistreated	1	0.5%
Total	89	40.3%

6.3.5. Effects of exposure to traumatic events

The IES measures subjects' preoccupation with thoughts associated with traumatic events. This measurement has five categories: 'not at all', 'a little bit', 'moderately', 'quite a bit' and 'extremely'. Those who reported 'not at all' indicated that they do not have a traumatic memory. Positive responses to IES statements show that a majority of subjects have mild to very severe traumatic memory associated with traumatic experiences. This high percentage of a group with traumatic memory is consistent with the high level of exposure to traumatic events. Details are presented in Tables 10, 11 and 12.

Table 10: Impact of exposure to traumatic events (IES results)

Impact	Severity	Frequency	Percent
<u>Any reminder brought back feelings</u>			
	Not at all	48	21.7%
	A little bit	43	19.5%
	Moderately	35	15.8%
	Quite a bit	58	26.2%
	Extremely	37	16.7%
<u>I had trouble staying asleep</u>			
	Not at all	54	24.4%
	A little bit	50	22.6%
	Moderately	41	18.6%
	Quite a bit	47	21.3%
	Extremely	29	13.1%
<u>Other things kept making me think about it</u>			
	Not at all	50	22.6%
	A little bit	43	19.5%
	Moderately	41	18.6%
	Quite a bit	52	23.5%
	Extremely	35	15.8%
<u>I felt irritable and angry</u>			
	Not at all	49	22.2%
	A little bit	43	19.5%
	Moderately	41	18.6%
	Quite a bit	42	19.0%
	Extremely	46	20.8%
<u>Avoided letting myself get upset</u>			
	Not at all	53	24.0%
	A little bit	40	18.1%
	Moderately	49	22.2%
	Quite a bit	44	19.9%
	Extremely	35	15.8%
<u>Thought about it when I didn't mean to</u>			
	Not at all	53	24.0%
	A little bit	39	17.6%
	Moderately	45	20.4%
	Quite a bit	45	20.4%
	Extremely	39	17.6%
<u>Felt as if it hadn't happened</u>			
	Not at all	55	24.9%
	A little bit	48	21.7%
	Moderately	38	17.2%
	Quite a bit	40	18.1%
	Extremely	40	18.1%
<u>Stayed away from reminders</u>			
	Not at all	59	26.7%
	A little bit	36	16.3%
	Moderately	39	17.6%
	Quite a bit	53	24.0%
	Extremely	34	15.4%

Table 11: Impact of exposure to traumatic events (IES results)

Impact	Severity	Frequency	Percent
Pictures popped into my mind	Not at all	52	23.5%
	A little bit	39	17.6%
	Moderately	37	16.7%
	Quite a bit	48	21.7%
	Extremely	45	20.4%
Jumpy and easily startled	Not at all	70	31.7%
	A little bit	44	19.9%
	Moderately	30	13.6%
	Quite a bit	42	19.0%
	Extremely	35	15.8%
Tried not to think about it	Not at all	51	23.1%
	A little bit	49	22.2%
	Moderately	31	14.0%
	Quite a bit	45	20.4%
	Extremely	45	20.4%
Lots of feelings/didn't deal with them	Not at all	57	25.8%
	A little bit	35	15.8%
	Moderately	37	16.7%
	Quite a bit	51	23.1%
	Extremely	41	18.6%
Feelings about it kind of numb	Not at all	64	29.0%
	A little bit	49	22.2%
	Moderately	29	13.1%
	Quite a bit	41	18.6%
	Extremely	38	17.2%
Acting/feeling like back at that time	Not at all	53	24.0%
	A little bit	43	19.5%
	Moderately	39	17.6%
	Quite a bit	50	22.6%
	Extremely	36	16.3%
Trouble falling asleep	Not at all	60	27.1%
	A little bit	32	14.5%
	Moderately	45	20.4%
	Quite a bit	47	21.3%
	Extremely	37	16.7%

Table 12: Impact of exposure to traumatic events (IES results)

Impact	Severity	Frequency	Percent
Waves of strong feeling about it			
	Not at all	59	26.7%
	A little bit	33	14.9%
	Moderately	43	19.5%
	Quite a bit	46	20.8%
	Extremely	40	18.1%
Tried to remove it from my memory			
	Not at all	52	23.5%
	A little bit	31	14.0%
	Moderately	44	19.9%
	Quite a bit	42	19.0%
	Extremely	52	23.5%
Had trouble concentrating			
	Not at all	59	26.7%
	A little bit	34	15.4%
	Moderately	43	19.5%
	Quite a bit	42	19.0%
	Extremely	43	19.5%
Reminders cause physical reactions			
	Not at all	75	33.9%
	A little bit	32	14.5%
	Moderately	36	16.3%
	Quite a bit	40	18.1%
	Extremely	38	17.2%
Dreams about it			
	Not at all	53	24.0%
	A little bit	32	14.5%
	Moderately	35	15.8%
	Quite bit	47	21.3%
	Extremely	54	24.4%
Felt watchful and on guard			
	Not at all	59	26.7%
	A little bit	24	10.9%
	Moderately	41	18.6%
	Quite a bit	42	19.0%
	Extremely	55	24.9%
Tried not to talk about it			
	Not at all	53	24.0%
	A little bit	32	14.5%
	Moderately	39	17.6%
	Quite a bit	37	16.7%
	Extremely	60	27.1%

This self-reported list of the impact of events indicates that many people who did not meet the DSM criteria for PTSD have reported traumatic memory associated with exposure to certain traumatic events. For example

“thought about it when I didn’t mean to” was reported by 76% (n=168); “pictures of it popped into my mind” was accounted by 76.5% (n=169) of respondents; “tried not to talk about it” was reported by 76% (n=168); “tried to remove it from my memory” was indicated by 76.5% (n=169); “I felt irritable and angry” was reported by 78.8% (n=172); and “acting or feeling like back at that time” was experienced by 76% (n=168) of subjects.

6.3.5.1. Psychiatric disorders

The key finding of this study is a higher than expected PTSD rate in this non-clinical population. This is closely linked to a high level of alcohol abuse and dependence. Other psychiatric disorders such as major depressive disorders are also identified. Table 13 presents the details of these major findings.

Table 13: Disorders identified (CIDI result)

Disorders	Frequency	Percent
PTSD	122	55.2%
Major Depression (recurrent)	44	20%
Major Depression (single)	5	2.3%
Dysthymic Disorder	4	1.8%
Alcohol abuse	163	73.8%
Alcohol dependence	74	33.5%
Cannabis abuse	52	23.5%
Cannabis dependence	13	5.9%
Inhalant abuse	6	2.7%
Amphetamine abuse	2	0.9%
Sedative abuse	1	0.5%
Other substance abuse	1	0.5%

The above results show that PTSD and other disorders are well above the national average. For details see section 6.6. on comparisons.

6.3.5.2. Traumatic exposure and PTSD

By being exposed to traumatic events, 97.3% (n=215) met the DSM-IV criterion 'A' for PTSD. Further breakdown of the results in each diagnostic criterion shows 88% (n=189) met criterion 'B' and 77.7% (n=167) of subjects who were exposed to traumatic events have met the DSM-IV criterion 'C' of PTSD. A total of 79.5% (n=171) also met criterion 'D' of the DSM-IV.

From the above reported groups a significant sample dropped out in DSM-IV criterion 'F' for PTSD. Criterion 'F' measures the level of disturbance with clinical significance and impairment in the areas of the victim's social and occupational role (APA, 1994). By not meeting this criterion, many subjects did not qualify for the overall diagnostic criteria of the disorder. A little over half, 55.2% (n=122), met the DSM-IV diagnostic criteria for PTSD prove the hypothesis about the relationship between exposure to traumatic events and PTSD.

6.3.5.2.1. CIDI: PTSD age at onset

The PTSD onset age indicates risks associated with a victim's age. While younger age shows a significant risk associated with development of PTSD, as age increases, the frequency of onset age falls. This also indicates the high risk of exposure to traumatic events in a particular age group. Details are reported in Table 14.

6.3.5.2.3. Traumatic events associated with PTSD

Analysis of a group of subjects who are positive for PTSD shows that physical attack (violence) constitutes 50% (n=61) and sexual abuse or rape is 35.2% (n=43) of this sub group. Witnessing trauma of others constituted 2.5% (n=3) and motor vehicle accidents represented 2.5% (n=3) of the PTSD group. The stolen generation was quoted by 3.3% (n=4) of the PTSD positive group. Others referring to being threatened with and without a weapon accounted for 5% (n=6) and 1.6% (n=2) respectively.

However, the above figures are well below the exposure rates reported in ITP. The ITP result shows that domestic violence, 43% (n=95), threatened with a weapon 52.5% (n=116) and threatened without a weapon 55.2% (n=122), and injury from violence in general was experienced by 40.7% (n=90). Despite being reported by a majority of subjects, the historical traumatic events such as destruction of culture and dispossession of land are not associated with PTSD when other directly experienced traumas are absent.

6.3.6. Socio-demographic associations

Variables from demographic data offer a number of socio-demographic risk factors related to the development of PTSD. These are gender, age and employment status. Gender appears to have a significant role in the development of PTSD. The rate of PTSD for men is 43.4% (n=53) compared

to women, 65.6% (n=69). This accounts for 59% of total female subjects in the study compared to 51% of total male subjects. A similar gender variation exists in the alcohol abusing population. Table 16 summarises the details below.

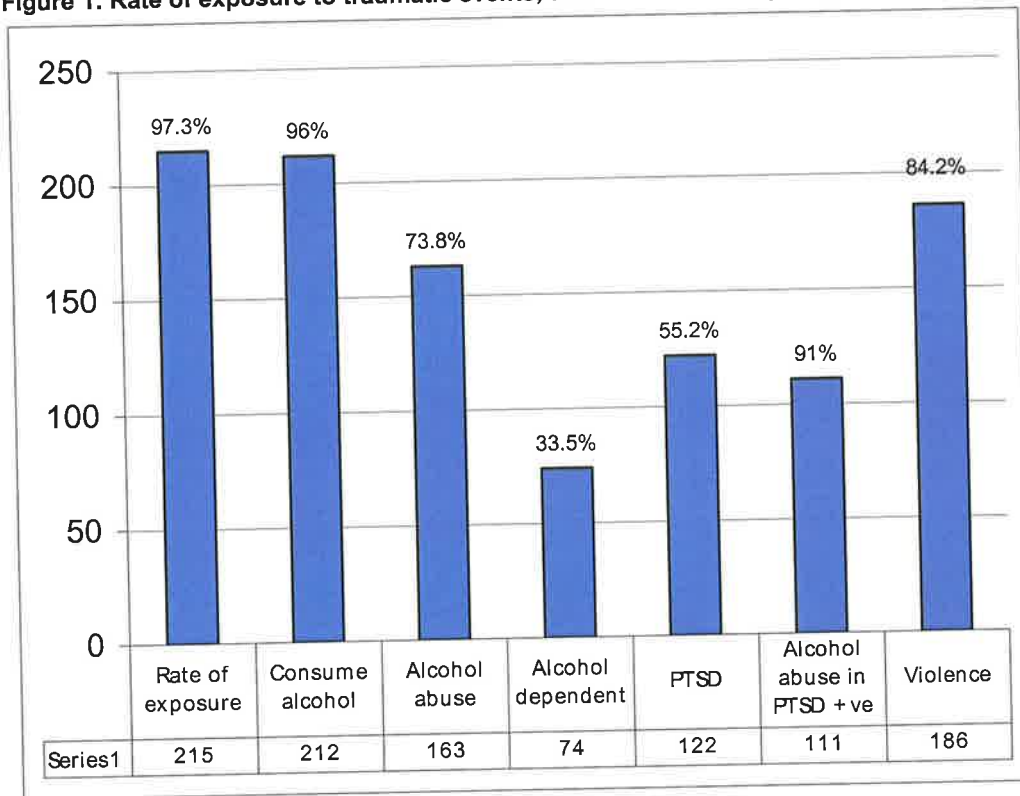
Table 16: Gender ratio in the rate of alcohol consumption and related disorders

	Male = % (N)	Female = % (N)	Total = % (N)
Consume drink containing alcohol	97.1% (101)	94.9% (111)	97.7% (212)
Alcohol abuse	82.7% (86)	65.8% (77)	73.8% (163)
Alcohol dependence	41.3% (43)	26.5% (31)	33.5% (74)
Drink but no disorder	7.7% (8)	14.5% (17)	11.3% (25)
Abstainer	6.7% (7)	6.8% (8)	5.4% (12)

6.3.7. Relationship between alcohol abuse, prevalence of PTSD and retraumatisation

A clear link between exposures to traumatic events, alcohol abuse and prevalence of PTSD, and rate of violence has been identified. In the subjects with PTSD, 91% (n=111) abuse alcohol, which is two-thirds (68.1%) of the population with an alcohol abuse disorder. This proves the hypothesis of the relationship between alcohol abuse and prevalence of PTSD. This is against the background of 97.3% of the population exposed to traumatic events and 96% who consume a drink containing alcohol. Figure 1 presents rates of exposure to traumatic events, alcohol abuse, PTSD rate, and the rate of violence.

Figure 1: Rate of exposure to traumatic events, alcohol abuse and prevalence of PTSD



6.3.8. Major depressive disorders

Major depression was identified in 24% (n=53) of the total number of subjects. Furthermore, within this group, 9.4% (n=5) of subjects had major depression single episode and the majority, 83.01% (n=44) had recurrent depressive disorder. Dysthymic disorder was also found in 7.5% (n=4) of subjects.

6.3.8.1. Age at onset of major depression

The youngest onset age for major depression (recurrent) was 14 and 22 for a single episode. In recurrent depression, 25% of the disorder population had depression within the 14 to 20 age range. In contrast, there is no under 20 age group with a single episode. Details are presented in Tables 17 and 18.

Table 17: Major depressive disorder (single episode) age at onset (CIDI)

Age	Frequency	Valid Percent	Cumulative Percent
22	1	20.0%	20.0%
23	1	20.0%	40.0%
27	1	20.0%	60.0%
35	1	20.0%	80.0%
52	1	20.0%	100.0%
Total	5	100.0%	

Table 18: Major depressive disorder (recurrent) age at onset (CIDI)

Age	Frequency	Valid Percent	Cumulative Percent
14	1	2.3%	2.3%
16	2	4.5%	6.8%
17	2	4.5%	11.4%
19	3	6.8%	18.2%
20	3	6.8%	25.0%
23	2	4.5%	29.5%
24	3	6.8%	36.4%
25	1	2.3%	38.6%
26	3	6.8%	45.5%
27	1	2.3%	47.7%
28	2	4.5%	52.3%
29	2	4.5%	56.8%
30	2	4.5%	61.4%
31	4	9.1%	70.5%
32	4	9.1%	79.5%
34	2	4.5%	84.1%
35	2	4.5%	88.6%
37	1	2.3%	90.9%
40	1	2.3%	93.2%
41	1	2.3%	95.5%
43	1	2.3%	97.7%
52	1	2.3%	100.0%
Total	44	100.0%	

6.3.9. Anxiety Disorders

One of the most interesting findings of this study is anxiety disorder. Significantly, 17.2% (n=38) of participants met criteria for this disorder, but did not meet the disability criterion. Therefore they did not meet the overall diagnostic criteria for anxiety disorders. This will be discussed in Chapter 7 in more detail. Table 19 presents a breakdown of participants who met the disorder criteria for anxiety disorders.

Table 19: Subjects who met the disorder criteria for various anxiety disorders

Disorder	Frequency	Percent
Specific Phobia	18	47.4%
GAD	10	26.3%
Social Phobia	4	10.5%
Agoraphobia	3	7.9%
Panic disorder	3	7.9%

These findings indicate the severity of other traumatic events to which the subject directs all attention and is preoccupied with. It is obvious that the problem is there, but the variables listed in CIDI as anxiety provoking appear to be not relevant to this population. For the group of subjects who met the disorder criteria, the disability criterion becomes irrelevant when they have bigger problems to deal with.

6.3.10. Alcohol and other substance abuse without psychiatric disorder

A significant minority, 21.3% (n=47) of total subjects met DSM-IV diagnostic criteria for alcohol abuse without having other psychiatric

disorders. In this subgroup all subjects have an alcohol abuse disorder, 74.5% met the criteria for alcohol dependence and 19.1% abuse cannabis.

Table 20 presents the distribution of this subgroup.

Table 20: Alcohol & other substance abuse without other psychiatric disorders

Disorders	Frequency	Percent
Alcohol abuse	47	99.9%
Alcohol dependence	35	74.5%
Cannabis abuse	9	19.1%
Cannabis dependence	2	4.1%
Inhalant abuse	3	6.4%
Sedative abuse	1	2.1%

Alcohol abuse is a common disorder in this subgroup while other disorders occurred as comorbid disorders.

6.3.10.1. Pattern of alcohol abuse

AUDIT results indicate a high level of alcohol consumption by a significant number of subjects. The number of subjects who reported consuming 7 or more alcohol drinks per drinking session was 59.5% (n=97).

Table 21 presents details.

Table 21: Standard drink consumed in a single drinking session

Amount consumed	Frequency	Percent
3 or 4 drinks	49	30.1%
5 or 6 drinks	35	21.5%
7 or more drinks	97	59.5%

6.3.10.2. Effects of alcohol on day-to-day activities of living

The impact of alcohol on the lives of individuals and families is significant. As indicated in AUDIT results, individuals who failed to do what was expected of them accounted for 50.3% of subjects with alcohol disorder. The negative effect of alcohol was reported by 2.5% daily, 25.2% weekly and 22.7% monthly not fulfilling their role or responsibility. Details are presented in Table 22.

Table 22: Impact of alcohol abuse on day-to-day activities of living

Effect	Daily	Weekly	Monthly	Total
Failed to do what was normally expected	2.5%	25.2%	22.7%	50.3%
Need drink to get going	3.1%	20.2%	11.7%	35.0%
Feel guilty after drinking	4.3%	18.4%	17.2%	39.9%
Unable to remember	3.7%	18.4%	14.1%	36.2%

Table 22 shows that a significant number of subjects' ability to carry out their responsibilities has been affected by alcohol. The secondary impact this has on others - especially on children - is a serious concern. One can also see that this behaviour has enormous social and economic costs. It makes people less productive and increases health and social costs.

6.3.10.3. Alcohol abuse and dependence: age at onset

The alcohol abuse onset age indicates that a considerable group of subjects started drinking alcohol as young as 15 years of age. The majority,

67.1% (n=110) met diagnostic criteria for alcohol abuse by the age of 20. Further analysis of this subgroup shows that 2.3% (n=5) developed the disorder at the age of 15; 9% (n=20) at 16; 10.9% (n=24) at 17; 9.5% (n=21) at 18; 12.2% (n=27) at 19; and 5.9% (n=13) by the of age of 20 years. Details of age at onset of alcohol abuse are presented in Table 23.

Table 23: Alcohol abuse age at onset (CIDI)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
15	5	2.3%	3.0%	3.0%
16	20	9.0%	12.2%	15.2%
17	24	10.9%	14.6%	29.9%
18	21	9.5%	12.8%	42.7%
19	27	12.2%	16.5%	59.1%
20	13	5.9%	7.9%	67.1%
21	4	1.8%	2.4%	69.5%
22	17	7.7%	10.4%	79.9%
23	9	4.1%	5.5%	85.4%
24	9	4.1%	5.5%	90.9%
25	2	.9%	1.2%	92.1%
26	2	.9%	1.2%	93.3%
27	2	.9%	1.2%	94.5%
28	1	.5%	.6%	95.1%
29	1	.5%	.6%	95.7%
31	1	.5%	.6%	96.3%
32	3	1.4%	1.8%	98.1%
34	1	.5%	.6%	98.8%
35	1	.5%	.6%	99.4%
36	1	.5%	.6%	100.0%
Total	163	74.2%	100.0%	

A similar pattern exists in the subjects who met the diagnostic criteria for alcohol dependence. The age of onset shows that the majority, 37.5% of the alcohol dependent population, developed the disorder by the age of 20 years. Details are presented in Table 24.

Table 24: Alcohol dependence age at onset (CIDI)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
16	2	.9%	2.8%	2.8%
17	3	1.4%	4.2%	6.9%
18	2	.9%	2.8%	9.7%
19	13	5.9%	18.1%	27.8%
20	8	3.2%	9.7%	37.5%
21	14	5.9%	18.1%	55.6%
22	8	3.6%	11.1%	66.7%
23	3	1.4%	4.2%	70.8%
24	3	1.4%	4.2%	75.0%
25	2	.9%	2.8%	77.8%
26	4	1.8%	5.6%	83.3%
27	2	.9%	2.8%	86.1%
28	4	1.8%	5.6%	91.7%
29	1	.5%	1.4%	93.1%
30	1	.5%	1.4%	94.4%
33	2	.9%	2.8%	97.2%
35	1	.5%	1.4%	98.6%
42	1	.5%	1.4%	100.0%
Total	74	33.5%	100.0%	

6.3.10.4. Alcohol as self-medication

A total of 96% (n=212) of subjects reported that they consume a drink containing alcohol. The alcohol disorder diagnosis from CIDI shows that 73.8% (n=163) met the diagnostic criteria for alcohol abuse. Furthermore, 45.4% (n=74) of this group also met criteria for alcohol dependence. This is against the background of 97.3% (n=215) of subjects having been exposed to traumatic events.

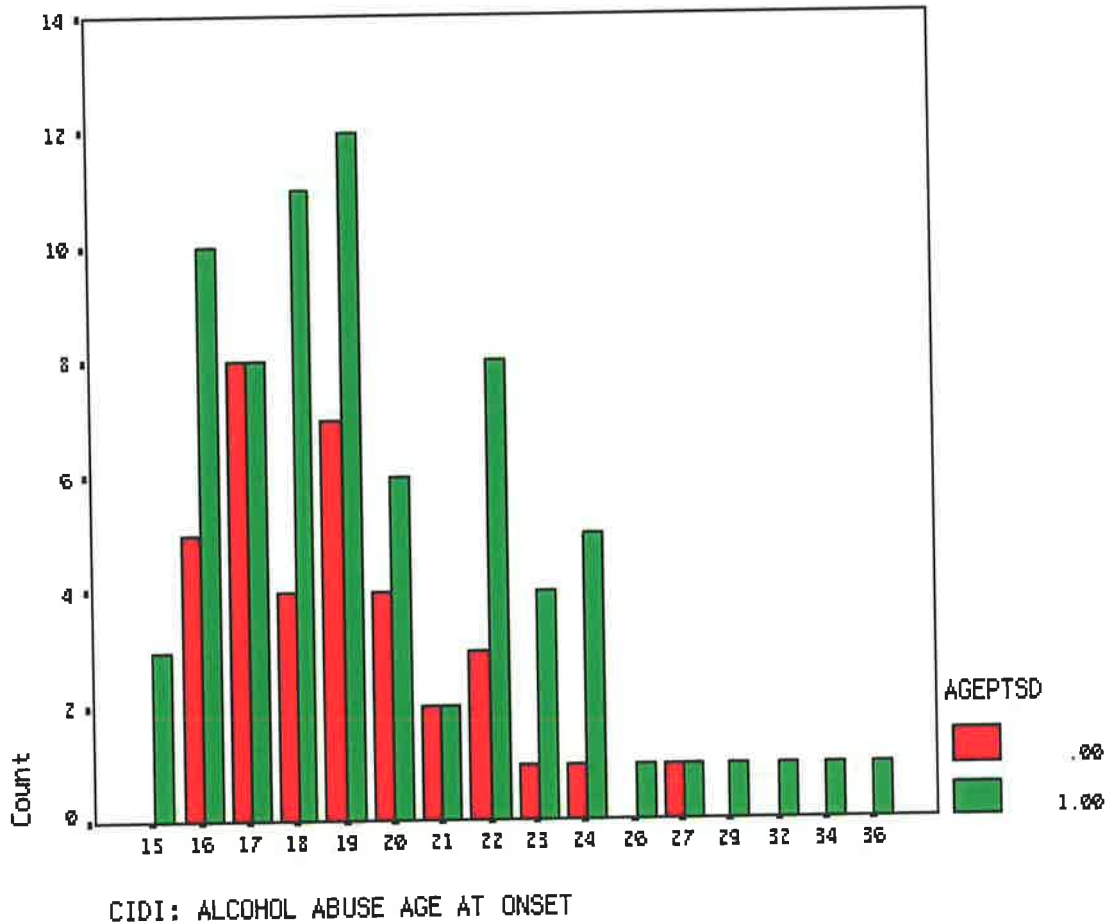
Further analysis of this group shows where age alcohol abuse onset is less than 20 years of age, 64.1% (n=50) had PTSD first. In contrast to where age of alcohol abuse onset is greater than 20 years of age, 75.8% (n=25) of this group had PTSD first. Details are shown below in Table 25.

Table 25: The relationship between PTSD & alcohol abuse age at onset

Order of onset	Frequency	Percent
PTSD first then alcohol abuse	75	67.6%
Alcohol abuse first then PTSD	36	32.4%

As shown above two-third PTSD cases preceded alcohol abuse onset age. This is the strongest link yet proving the hypothesis of the relationship between PTSD and alcohol abuse and alcohol as self-medication. The following figure gives further demonstration.

Figure 2: PTSD onset age preceded alcohol abuse



Key: 1.00 = PTSD preceded alcohol .00 = Alcohol abuse preceded PTSD

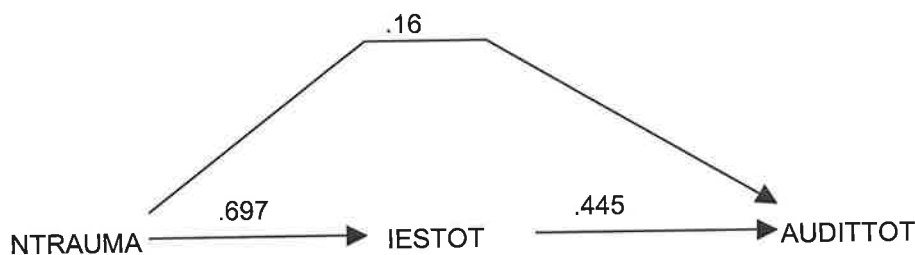
The above figure shows that most of the onset age was in the range of 16 to 22, suggesting various factors such as age and social vulnerability of this group where traumatic exposure is very high. The minimum age of onset for PTSD in the group who had PTSD before alcohol abuse is 5 years. In contrast, the minimum onset age of PTSD in the group where alcohol abuse preceded PTSD on set age is 19 years. Table 26 presents details.

Table 26: Mean difference in age of onset where PTSD preceded alcohol abuse

	PTSD onset precedes alcohol abuse		Alcohol onset precedes PTSD	
	PTSD	Alcohol abuse	PTSD	Alcohol abuse
Mean	16.51	20	22.39	18.97
Std. Deviation	5.28	4.15	3.25	2.54
Minimum	5	15	19	16
Maximum	35	36	29	27

Partial correlation coefficient analysis further proves the self-medication hypothesis. The more the person gets exposed to traumatic events the higher the IES score and the higher the IES score is, the higher the AUDIT total score. The following diagram demonstrates this significance.

Diagram 3: Demonstration of partial correlation

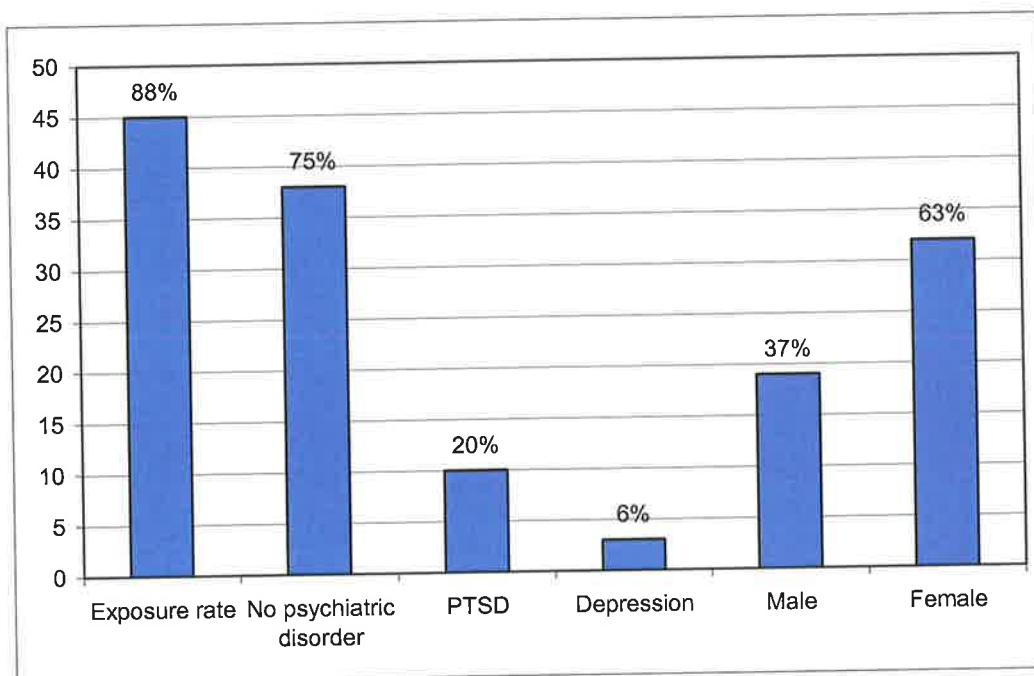


The above diagram shows that without exposure to traumatic events and subsequent traumatic memory, the likelihood of alcohol abuse is significantly less.

6.3.11. Subjects with no alcohol disorders

A significant group of subjects were found to be able to control their drinking behaviour. Despite exposure to traumatic events, and subsequent PTSD in some subjects of this group, 23.1% (n=51) of the total sample survived trauma, PTSD and depression without resorting to excessive alcohol consumption as self-medication. In this group 20% (n=10) of subjects have PTSD. Details are presented in Figure 3.

Figure 3: Rates of traumatic exposure and PTSD within subjects no alcohol abuse disorder CIDI



As shown above women are more likely not to resort to alcohol compared to men. The rate is 63% (n=32) for women and 37% (n=19) for men.

6.3.12. Suicide and suicidal thoughts

While identifying suicide and suicidal thoughts was not part of this study's objectives, the ITP has identified that 25.3% (n=56) of subjects are affected by suicide attempts or thoughts of others who are close to them. Furthermore, the depression module of CIDI has elucidated troubling thoughts of associated with suicidal ideation of self or others. Results from the CIDI section of depression shows 17.5% (n=39) having suicidal thoughts. The CIDI identified no attempted suicide.

As the majority of the subjects are exposed to traumatic events, suicidal idea may well be influenced by traumatic exposure. Symptom specific analysis of the group of PTSD subjects with the group of depression without PTSD shows no statistical difference in IES total score. The group with depression and PTSD IES total score mean is 57.08 and standard deviation is 25.44 compared to PTSD only group mean being 57.13 and standard deviation is 22.29. This analysis explains two important points: 1) that exposure to traumatic events causes PTSD but also depression; and 2) both disorders have shared symptoms including suicidal ideations.

The group who reported suicidal ideations met diagnostic criteria for multiple disorders. As a result of this, the analysis of odds ratio and relative risk could not be carried out due to the limitations of the data analysis support

available. The calculation of the relative risk in this population is a matter of interest. In the further exploration of these data, this question will be pursued. It is of particular importance to further examine these relationships, given the concern that suicide is currently attracting in the aboriginal community and that traumatic stress appears to be a significant risk factor.

6.4. Comorbid disorders

The majority of subjects who have PTSD also suffer from one or more other disorders. Alcohol abuse is the common comorbidity with a rate of 68.10% of the alcohol abusing population meeting the PTSD diagnostic criteria. This accounts for 91% of PTSD positive subjects and indicates the likelihood of alcohol being used as self-medication.

Furthermore, alcohol dependence is also the second likely comorbid disorder with 62.2% of this population meeting the diagnostic criteria for PTSD. This represents 37.7% of the PTSD population. Cannabis abuse is also the common comorbidity with 66.04% of the population abusing this drug meeting PTSD diagnostic criteria. General anxiety disorder is more likely to occur in association with PTSD and alcohol abuse than depression and alcohol abuse. Details are presented in Table 27.

Table 27: Comorbidity of other anxiety disorders with PTSD, major depression and substance abuse

Disorders	GAD	Specific phobia	Agoraphobia
PTSD & major depression	10.52%	5.26%	2.63%
PTSD with alcohol & substances abuse	34.21%	36.84%	10.52%
Major depression, alcohol & substances abuse	15.78%	10.52%	7.89%
Alcohol and other substances abuse	28.94%	39.47%	2.63%

6.5. Multivariate analysis

Statistical analysis has identified a number of relationships between various disorders and factors contributing to their development. As shown in statistics presented in Table 28, having PTSD increases the risk of major depressive disorder by 3.44 times with the confidence interval of 1.60-7.38. Having PTSD also increases alcohol abuse by 7.96 times and increases the risk of cannabis abuse by 3.54 times. Table 28 below presents details.

Table 28: Various disorders with and without PTSD

	PTSD	No PTSD	OR	CI
MDD (Single)	2.5%	2.0%	1.22	.200-7.465
MDD (Recurrent)	27.9%	10.1%	3.44	1.60-7.38*
Dysthymia	.8%	3.0%	.264	.027-2.583
Agoraphobia	2.5%	-	-	-
Panic Disorder	1.60%	1.0%	1.63	.146-18.28
Specific Phobia	6.6%	10.1%	.625	.237-1.648
Social Phobia	.8%	3.0%	.264	.237-2.583
GAD	3.3%	6.1%	.525	.144-1.916
Alcohol abuse	90.2%	53.5%	7.956	3.893-16.261*
Alcohol Dependence	36.9%	29.3%	1.411	.799-2.489
Cannabis Abuse	32.8%	12.1%	3.537	1.735-7.209*
Cannabis Dependence	6.6%	5.1%	1.319	.418-4.168

Being older than 20 increases the risk of PTSD by 3.688 times and decreases risk of cannabis abuse by a margin of .319 times. This figure must be read in the context of the size of the group, which is 30.9% (n=37) for people older than 20 and majority of 69.1% (n=85) for the group younger than 21. Therefore, the statistics explain that only within the subjects group of who are older than 20 years of age, more subjects have PTSD. Table 29 presents details.

Table 29: Age-related risk in the development of psychiatric disorders

	Age<20	Age>20	OR	CI
MDD (Single)	0	2.4%	-	-
MDD (Recurrent)	13.3%	20.4%	1.665	.362-7.663
Dysthymia	0	1.9%	-	-
Agoraphobia	0	1.5%	-	-
Panic Disorder	0	1.5%	-	-
Specific Phobia	0	8.7%	-	-
Social Phobia	0	1.9%	-	-
PTSD	26.7%	57.3%	3.688	1.136-11.967
Alcohol abuse	60%	74.8%	1.974	.671-5.812
Alcohol Dependence	20%	34.5%	2.104	.575-7.699
Cannabis Abuse	46.7%	21.8%	.319	.11-.928
Cannabis Dependence	6.7%	5.8%	.866	.105-7.149
GAD	13.3%	3.9%	.263	.051-1.365

Being older than 25 years increases the risk of major depressive disorder by 2.9 times, increases the risk of alcohol abuse by 1.46 times and decreases risk of cannabis abuse by .272 times. This analysis shows that being younger than 25 increases the risk of PTSD by 3.688 times and decreases the risk of cannabis abuse by a margin of .319 times. Details are shown in Table 30 below.

Table 30: Age-related risk in the development of psychiatric disorders

	Age<25	Age>25	OR	CI
MDD (Single)	0	3.0%	-	-
MDD (Recurrent)	9.4%	23.2%	2.90	1.08-7.797
Dysthymia	0	2.4%	-	-
Agoraphobia	0	1.8%	-	-
Panic Disorder	0	1.8%	-	-
Specific Phobia	7.5%	8.3%	1.11	.35-3.54
Social Phobia	3.8%	1.2%	.307	.042-2.236
PTSD	47.2%	57.7%	1.53	.823-1.673
GAD	7.5%	3.6%	.454	.123-1.673
Alcohol abuse	67.9%	75.6%	1.463	.744-2.875
Alcohol Dependence	20.8%	37.5%	1.463	1.100-4.771
Cannabis Abuse	43.4%	17.3%	.272	.139-.534
Cannabis Dependence	5.7%	6.0%	1.055	.279-3.984

The findings also show increased risks associated with having comorbid disorder of PTSD and major depressive disorder. Table 31 presents details.

Table 31: Risks associated with comorbidity of PTSD/MDD

	No PTSD/No MMD	PTSD/MMD	OR	CI
Agoraphobia	-	2.7%	-	-
Panic Disorder	1.0%	2.7%	2.122	.166-44.68
Specific Phobia	10.1%	8.1%	.785	.204-3.03
Social Phobia	3%	-	-	-
GAD	6.1%	8.1%	1.31	.324-5.78
Alcohol abuse	53.5%	94.6%	15.19	3.462-66.64
Alcohol Dep.	29.3%	29.7%	1.021	.45-2.34
Cannabis Abuse	12.1%	40.5%	4.94	2.03-12.06
Cannabis Dep.	5.1%	5.4%	1.074	.199-5.79

Having PTSD and MDD increases the risk of alcohol abuse by 15.19 times and cannabis abuse 4.94 times. A group comparison shows variations in likelihood of exposure to traumatic events in the group with PTSD only and PTSD and alcohol abuse as comorbid disorders. The group with PTSD and alcohol abuse disorder is more likely to be threatened with a weapon than the group with PTSD only. A similar pattern is noted across the ITP list of traumatic events. Table 32 presents these details below.

Table 32: Traumatic events indexed to PTSD and rate of alcohol abuse (ITP & CIDI results)

Traumatic Events	PTSD	PTSD & Alcohol	OR	CI
Taken away from parents	16.7%	10.0%	.556	.108-2.867
Sibling removed	-	8.2%	-	-
One parent was removed	-	12.7%	-	-
Both parents were removed	8.3%	3.6%	.415	.043-4.048
Your child was taken away	-	2.7%	-	-
Denied access to child	-	5.5%	-	-
Police brutality during arrest	33.5%	41.8%	1.437	.408-5.061
Assaulted in police cell	16.7%	37.3%	2.971	.620-14.23
Threatened by police	41.7%	49.1%	1.35	.404-4.514
Assaulted by fellow prisoner	-	21.1%	-	-
Physical abuse as a child	16.7%	46.8%	4.397	.92-21-009
Sexual assault as a child	16.7%	29.4%	2.078	.431-10.01
Sexual assault/rape as an adult	-	38.5%	-	-
Subjected to domestic violence	50%	63.3%	1.725	.521-5.70
Threatened with weapon	50%	78.0%	3.542	1.047-11.983
Threatened without weapon	75%	78.0%	1.181	.296-4.706
Injured from violence	41.7%	58.7%	1.991	.594-6.67
Injured from MVA	8.35%	20.9%	2.908	.357-23.702
Tortured	-	.9%	-	-
Kidnapped	8.3%	7.3%	.863	.099-7.556
Witnessed someone badly injured	58.3%	50.9%	.741	.222-2.477
Witnessed someone attacked	58.35%	58.2%	.994	.297-3.328
Witnessed domestic violence	66.7%	59.1%	.727	.205-2.544
Witnessed suicide or suicide attempts	25.0%	36.4%	1.714	.439-6.79
Found dead body	-	19.1%	-	-
Someone close died from violence	75.0%	50.9%	.346	.089-1.35
Relative subjected to police brutality	66.7%	85.55%	2.937	.791-10.909
Learned of destruction of culture	75%	90.9%	3.33	.75-14.34
Learned of dispossession of land	91.7%	93.6%	1.338	.150-11.90
Learned siblings were mistreated	58.35%	90%	6.429	1.742-23.725
Subjected to relentless racism	83.3%	90.9%	2.00	.384-10.43
Other events	58.3%	44.5%	.574	.171-1.920

A person with comorbid disorder of PTSD and alcohol abuse is 3.452 times more likely to be threatened with a weapon than PTSD alone, and 6.429 times likely to find his/her siblings mistreated. Group comparisons of PTSD symptoms reported in IES and the total scores of AUDIT and IES shows that the group with PTSD and major depressive disorder has significantly higher avoidance, intrusion and hyperarousal symptoms than the group with no PTSD and no major depressive disorder. However, the group with PTSD only has a slightly higher score in all three PTSD symptoms than the group with PTSD and major depressive disorder. In contrast, the group

with PTSD and major depressive disorder has a higher AUDIT total score than the group with PTSD only. Table 33 presents these details.

Table 33: PTSD symptoms in IES and AUDIT total scores

	No PTSD & No MDD = 46		MDD Only = 53		PTSD Only = 12		PTSD & MDD = 109	
	MN	SD	MN	SD	MN	SD	MN	SD
IESRAV	.68	.96	1.33	1.23	2.66	1.41	2.60	.98
IESRINT	.68	.93	1.34	1.18	2.58	1.41	2.63	.97
IESRHYP	.62	.97	1.32	1.25	2.65	1.44	2.53	1.03
IESTOT	14.60	20.84	29.30	26.57	58.00	31.20	57.03	21.28
AUDIT0T	4.00	5.72	18.47	7.91	3.58	5.23	18.70	7.89

Further analysis of these group scores shows some statistically significant mean differences between groups (see Table 34 below). Due to the size of the table, groups are coded numerically and defined as follows. The group with no PTSD and no major depressive disorder is coded .00, while the group with major depressive disorder is coded 1.00. The group with PTSD only is coded 2.00 and the group with PTSD and major depressive disorder is coded 3.00.

Table 34: Comparison of mean differences of PTSD symptoms between groups

Dependent Variable	(1) PTSDMMD2	(1) PTSDMDD2	Mean difference (1-1)	Std error	Sig	95% Confidence Interval	
						Lower Bound	Upper Bound
IESRAV	.00	1.00	-1.8279*	.31247	.000	-2.7084	-.9475
		2.00	-1.7558*	.15475	.000	-2.1918	-1.3197
		3.00	-1.9043*	.20108	.000	-2.4709	-1.3377
	1.00	.00	1.8279*	.31247	.000	.9475	2.7084
		2.00	.0722	.31291	.997	-.8095	.9539
		3.00	-1.9043	.33823	.997	-1.0294	.8766
	2.00	.00	1.7558*	.15475	.000	1.3197	2.1918
		1.00	.0764	.31291	.997	-.9539	.8095
		3.00	.1486	.20178	.909	-.7171	.4200
	3.00	.00	-1.9043*	.20108	.000	1.3377	2.4709
		1.00	.0764	.33823	.997	-.8766	1.0294
		2.00	.1486	.20178	.909	-.4200	.7171
IESRINT	.00	1.00	-1.6897*	.30770	.000	-2.5567	-.8227
		2.00	-1.7238*	.15239	.000	-2.1532	-1.2944
		3.00	-1.9754*	.19802	.000	-2.5333	-1.4174
	1.00	.00	1.6897*	.30770	.000	.8227	2.5567
		2.00	-.0342	.30814	1.000	-.9024	.8341
		3.00	-.2857	.33308	.865	-.2242	.6528
	2.00	.00	1.7238*	.15239	.000	1.2944	2.1532
		1.00	.0342	.30814	1.000	-.8341	.9024
		3.00	-.2515	.33308	.659	-.8114	.3083
	3.00	.00	1.9754*	.19802	.000	1.4174	2.5333
		1.00	.2857	.33308	.865	-.6528	1.2242
		2.00	.2515	.19870	.659	-.3083	.8114
IESRHYP	.00	1.00	-1.8473*	.32355	.000	-2.7589	-.9356
		2.00	-1.7240*	.16024	.000	-2.1755	-1.2725
		3.00	-1.9028*	.20822	.000	-2.4895	-1.3162
	1.00	.00	1.8473*	.32355	.000	.9356	2.7589
		2.00	.1232	.32401	.986	-7.7897	1.0362
		3.00	-.0556	.35023	.999	-1.0424	.9313
	2.00	.00	1.7240*	.16024	.000	1.2725	2.4895
		1.00	-.1232	.32401	.986	-1.0362	1.0424
		3.00	-.1788	.20893	.865	-.7675	.7675
	3.00	.00	1.9028*	.20822	.000	1.3162	2.4895
		1.00	.0556	.35023	.999	-.9313	1.0424
		2.00	.1788	.20893	.865	-.4099	.7675
IESRTOT	.00	1.00	-39.3822*	6.77235	.000	-54.4615	-20.3028
		2.00	-38.1812*	3.35354	.000	-47.6303	-28.7321
		3.00	-42.3822*	4.35762	.000	-54.6605	-30.1039
	1.00	.00	39.3822*	6.77135	.000	20.3028	58.4616
		2.00	1.2010	6.78100	.999	-17.9056	20.3075
		3.00	-3.0000	7.32971	.983	-23.6526	17.1039
	2.00	.00	38.1812*	3.35354	.000	28.7321	47.6303
		1.00	-1.2010	6.78100	.999	-20.3075	17.9056
		3.00	-4.2010	4.37260	.820	-16.5215	8.1195
	3.00	.00	42.3822*	4.35762	.000	30.1039	54.6605
		1.00	3.0000	7.32971	.983	-17.6526	23.6526
		2.00	4.2010	4.37260	.820	-8.1195	16.5215

*The mean difference of .05 level is statistically significant.

A group with no PTSD and no major disorder has significantly less hyperarousal symptoms than a group with PTSD only and a group with major depressive disorder only. Furthermore, a group with no PTSD and no major depressive disorder also has a significantly less IES total score than the other

three groups. A group with no PTSD and no major depressive disorder has a significantly lower AUDIT total score than groups with PTSD only and major depressive disorder and PTSD as comorbid disorders. Details are presented in Table 35.

Table 35: Mean difference between groups in AUDIT total score

Dependent Variable	(1) PTSDMMD2	(1) PTSDMDD2	Mean difference (1-1)	Std error	Sig	95% Confidence Interval	
						Lower Bound	Upper Bound
AUDITTOT	.00	1.00	-4.7011	2.89965	.454	-12.8711	3.4688
		2.00	-5.6306*	1.43606	.002	-9.6767	-1.5844
		3.00	-7.3228*	1.84811	.002	-12.5299	-2.1156
	1.00	.00	4.7011	2.89965	.454	-3.4688	12.8711
		2.00	-.9294	2.90378	.992	-9.1110	7.2522
		3.00	-1-2.6216	3.12813	.873	-11.4353	6.1921
	2.00	.00	5.6306*	1.43606	.002	1.5844	9.6767
		1.00	.9294	2.90378	.992	-7.2522	9.1110
		3.00	-1.6922	1.85459	.842	-6.9176	3.5332
	3.00	.00	7.3228*	1.84811	.002	2.1156	12.5299
		1.00	2.6216	3.12813	.873	-6.1921	11.4353
		2.00	1.6922	1.85459	.842	-3.5332	6.9176

A group with no alcohol abuse and no PTSD have significantly lower avoidance and intrusion scores than groups with major depressive disorder only, and PTSD only and major depressive disorder and PTSD together. However, groups with alcohol abuse only also have significantly lower avoidance scores than the group with PTSD and alcohol abuse as a comorbid disorder. Furthermore, a group with alcohol abuse disorder only has significantly lower intrusion scores than PTSD only, and PTSD and alcohol as a comorbid disorder. The group is defined as follows: .00: no PTSD and no alcohol abuse group; 1.00: alcohol abuse only group; 2.00: PTSD only group;

and 3.00: PTSD and alcohol abuse group. Table 36 presents analysis of these groups.

Table 36: Mean difference between groups in IES scores

Dependent Variable	(1) PTSDALC2	(1) PTSDALC2	Mean difference (1-1)	Std error	Sig	95% Confidence Interval	
						Lower Bound	Upper Bound
IESRAV	.00	1.00	-.6481*	.21584	.031	-1.2563	-.0400
		2.00	-1.9846*	.34719	.000	-2.9629	-1.0063
		3.00	-1.9189*	.18832	.000	-2.4495	-1.3882
	1.00	.00	.6481*	.21584	.031	.04000	1.2563
		2.00	-1.3365*	.34241	.002	-2.3013	-.3717
		3.00	-1.2707*	.17936	.000	-1.7761	-.7653
	2.00	.00	1.9846*	.34719	.000	1.0063	2.9629
		1.00	1.3365*	.34241	.002	.3717	2.3013
		3.00	.0657	.32577	.998	-.8522	.9837
	3.00	.00	1.9189*	.18832	.000	1.3882	2.4495
		1.00	1.2707*	.17936	.000	.7653	1.7761
		2.00	-.0657	.32577	.998	-.9837	.8522
IESRINT	.00	1.00	-.6587*	.21093	.023	-1.2530	-.0644
		2.00	-1.8970*	.33929	.000	-2.8530	-.9410
		3.00	-1.9519*	.18404	.000	-2.4705	-1.4334
	1.00	.00	.6587*	.21093	.023	.0644	1.2530
		2.00	-1.2383*	.33463	.004	-2.1812	-.2955
		3.00	-1.2933*	.17528	.000	-1.7871	-.7994
	2.00	.00	1.8970*	.33929	.000	.9410	2.8530
		1.00	1.2383*	.33463	.004	.2955	2.1812
		3.00	-.0549	.31836	.999	-.9520	.8421
	3.00	.00	1.9519*	.18404	.000	30.1039	2.4705
		1.00	1.2933*	.17528	.000	-17.6526	1.7871
		2.00	.0549	.31836	.999	-8.1195	.9520
IESRHYP	.00	1.00	-.6996*	.22237	.021	-1.3262	-.0731
		2.00	-2.0336*	.35771	.000	-3.0415	-1.0257
		3.00	-1.9162*	.19403	.000	-2.4629	-1.3695
	1.00	.00	.6996*	.22237	.021	.0731	1.3262
		2.00	-1.3340*	.35279	.003	-2.3280	-.3400
		3.00	-1.2166*	.18480	.000	-1.7373	-.6959
	2.00	.00	2.0336*	.35771	.000	1.0257	3.0415
		1.00	1.3340*	.35279	.003	.3400	2.3280
		3.00	-.1174	.335664	.989	-.8283	1.0631
	3.00	.00	1.9162*	.19403	.000	1.3695	2.4629
		1.00	1.2166*	.18480	.000	.6959	1.7373
		2.00	-.1174	.33564	.989	-1.0631	.8283
IESRTOT	.00	1.00	-14.6932*	4.66816	.021	-27.8465	-1.5399
		2.00	-43.3913*	7.50912	.000	-64.5494	-22.2332
		3.00	-42.4280*	4.07304	.000	-53.9044	-30.9516
	1.00	.00	14.6932*	4.66816	.021	1.5399	27.8465
		2.00	-28.6981*	7.40582	.002	-49.5652	-7.8311
		3.00	-27.7348*	3.87928	.000	-38.6653	-16.8043
	2.00	.00	43.3913*	7.50912	.000	22.2332	64.5494
		1.00	28.6981*	7.40582	.002	7.8311	49.5652
		3.00	.9633	7.04585	.999	-18.8895	20.8161
	3.00	.00	42.4280*	4.07304	.000	30.9516	53.9044
		1.00	27.7348*	3.87928	.000	16.8043	38.6653
		2.00	-.9633	7.04585	.999	-20.8161	18.8895

Furthermore, a group with no PTSD has significantly less avoidance symptoms than groups with major depressive disorder only, PTSD only and PTSD and major depressive disorder together. The groups with no PTSD, and no major depressive disorder have significantly less intrusion symptoms than groups with major depressive disorder only, PTSD only and major depressive disorder and PTSD together.

Multiple comparisons have shown that the subgroup with no alcohol disorder and no PTSD has a lower hyperarousal score than the three other groups with alcohol disorder, PTSD and alcohol and PTSD. Groups with no major depressive disorder and no PTSD have significantly less hyperarousal symptoms than groups with PTSD only, major depressive disorder only, and PTSD and major depressive disorder together. Furthermore, the group with no PTSD and no major depressive disorder has a significantly less IES total score than the other three groups.

6.6. Comparisons

A comparison of the findings from this study with the National Wellbeing and Mental Health Survey (ABS, 2000) shows that the prevalence of PTSD and alcohol abuse is higher in these communities than the national average. This comparison proves: hypothesis A 2 which stated that the prevalence of PTSD will be higher in these community than the prevalence in the general population; and A 3 which hypothesised that the rate of alcohol abuse in these community is higher than prevalence recorded in the general

population. The results of the ABS (2000) and this study's are presented for comparison in Table 37.

Table 37: Comparison of this study with the ANWBMH Survey results

Disorder	Study population	National Wellbeing MH Survey General population
PTSD	55.2%	1.3%
Alcohol dependence	33.5%	4.1%
Alcohol abuse	73.8%	1.9%
Cannabis dependence	5.9%	1.5%
Cannabis abuse	23.5%	.8%

The rate of exposure to traumatic events found in this study, compared to the results of the Australian National Survey of Wellbeing and Mental Health, shows a higher rate of exposure to traumatic events in these communities than the national average. This comparative analysis proves that the original hypothesis A 1 - the rate of exposure to traumatic events will be higher in these communities than the national average – is correct. Comparison of exposure rate on selected traumatic events is presented in Table 38.

Table 38: Comparison of lifetime prevalence of traumatic experiences

Trauma	This Study Total	ANWMHS	
		M	F
Physical attack (injured by violence)	40.7%	12.9%	5.4%
Threatened with weapon	55.5%	16.5%	7.0%
Threatened without weapon	55.2%	-	-
Rape	21.3%	.6%	5.4%

The above comparison used only selected and similar variables reported in both studies. Otherwise, the rate of exposure and types of traumatic events reported in the study are numerous and it is difficult to compare the findings.

6.7. Summary

The study analysed data gathered from 96.50% of the population aged between 18 to 65 years in two remote towns and surrounding communities in Central West Region of Western Australia. In terms of gender, the demographic characteristic of the study population indicates that 53% of subjects were female and 47% were male. Furthermore, 29% (n=64) were employed. This includes 8.14% full-time, 13.12% part-time and 7.7% casual employees. Of a total of 221 subjects who took part in the study, 97.3% (n=215) were exposed to traumatic events. While some of the traumatic events experienced by subjects are unique to this population, others are universal such as interpersonal violence, sexual violence and motor vehicle accidents.

Of the people who participated in this study, 55.2% (n=122) met DSM-IV diagnostic criteria for PTSD. Major depression (recurrent) was 20% (n=44) while single episode was 2.3% (n=5). The alcohol abuse rate was 73.8% (n=163) and alcohol dependence was 33.5% (n=74). Cannabis amounted to 23.5% (n=52). Suggesting the strongest link yet made between alcohol

abuse and PTSD, 91% of PTSD subjects were also confirmed as abusing alcohol. This represents 68.1% of the alcohol abusing population.

Chapter 7: Discussion

7.1. Introduction

It is appropriate to start this chapter with pertinent questions. Did the study address its original question: what is the prevalence of PTSD in Aboriginal communities? Is there any relationship between exposure to traumatic events, alcohol abuse and prevalence of PTSD? Can the traumatic experience of past generations affect current generations? What forms of difficulties were experienced with the various instruments used in this study? What is the significance of the findings?

Before delving into discussion of the findings in the context of the above questions, the author believes that it is necessary to reflect on the study process and highlight some of the problems encountered. This includes procedural problems as well as problems associated with the instruments and environment. While enormous problems were experienced during the course of this study, especially the fieldwork, the study has certainly addressed the above questions. It has found rates of exposure to traumatic events, a prevalence of PTSD and established the relationship between exposure to traumatic events, and PTSD and alcohol abuse in this population. These findings raise questions like: are these findings applicable to other Aboriginal people in Australia? What is the significance of these

findings beyond Aboriginal culture? These questions will be taken into account and addressed systematically in this chapter.

This chapter discusses the findings in the light of evidence from literature and prior knowledge in the field. First, the strengths and weaknesses of the instruments will be discussed. This will be followed by on the layers of trauma which comments on repeated exposure to traumatic events and their effects. Discussion on the notion of trauma in Aboriginal communities will cover the response of Aboriginal culture to traumatic exposure and the challenge of PTSD. Furthermore, traumatic memory as a pathway to PTSD will be discussed in the light of the theory of traumatic memory. Comments will be made on associations between violence, PTSD and alcohol. The demographic variations noted in these findings will be discussed and finally, comments will be made about the group of subjects who do not have alcohol-related problems and who are referred to as a role models. The remaining sections of chapter discuss on the significance of the findings. In this section, the discussion covers the broad relevance of the findings, exploring generalisability of the findings beyond a specific culture.

7.2. Strengths and weaknesses of the instruments

The author felt that it is important to highlight the strengths and weaknesses of instruments used in this study before discussing the findings. As noted in Chapter 5, the instruments applied in the study population had not been used in any other previous research on Aboriginal people. Problems

encountered in this study offer valuable first-hand information on the validity and applicability of these instruments for future research in the field.

Use of the CIDI for data collection in this study was a matter of critical discussion in which the author and principal supervisor sought expert advice from a prominent academic and psychiatrist, Professor Ernest Hunter, who has extensive experience in Aboriginal mental health. It was acknowledged that in the absence of any other suitable instrument used in other non-western cultural groups (de Graaf et al., 2002; Andrews et al., 1996; Peters et al., 1996; Newman et al., 1996), the CIDI was the best available choice. However, the author was cautioned about some difficulties in terms of time and cultural sensitivity.

With these points in mind, a pilot study was undertaken and the potential problems were observed and participants' feedback was obtained. On the basis of feedback from the pilot study (Chapter 5, section 5.3), explaining to subjects some aspects of the instrument that may cause confusion was used as a standard practice in the course of the study. Despite these efforts, as anticipated some problems were encountered with CIDI. Length of time required to administer the instrument was a general problem that required much effort to complete the interview within the subject's concentration span.

Specific problems were encountered in the anxiety section of the instrument. Events listed as anxiety provoking such as fear of insects, animals, heights, tunnels, lifts, closed places, etc. were not relevant to the

subject's experience and environment. As a result of this, the instrument performed poorly in this section.

The other pitfall of the CIDI is in the PTSD section where the instrument asks about events associated with PTSD. For example, subjects who referred to a physical attack on the PTSD index event were not given the opportunity to specify what sort of attack. In addition, culturally inappropriate questions in the areas of sexuality, upset some male subjects and were embarrassing to some female subjects as they were asked direct questions about their private lives.

There seemed to be a number of contributing factors, including the need to complete interviews in the shortest possible time. In addition, the issue of cultural sensitivity and keeping the subject as calm as possible during the interview may have played some role. For example, two subjects walked out from the interview due to a perceived insensitivity of the author. However, this perceived insensitivity was due to repeated questions. The incident took place despite the fact that it was explained to the subjects prior to the interview that some questions would be repeated in a different context.

Regardless of the above reported difficulties, the CIDI has proved to be useful and applicable to indigenous experiences as has been the case with other ethnic groups (Peters et al., 1996; Robins et al., 1988). Use of this instrument which was applied in western and non-western cultural groups in various parts of the world not only validates the instrument but also corroborates the existence of PTSD as a psychiatric condition in ethnic communities and highlights the need for urgent intervention.

In reference to IES the statements were very clear. Its contents were well understood, and there was no difficulty reported. These features are consistent with its qualities reported in Joseph (2000) and Horowitz (1979). However, some statements required an explanation, as there was no reference to traumatic event. For example, a statement such as 'pictures popped up in my mind' was confusing to some participants. Except for these minor issues, IES has proved to have very good psychometric qualities. It has performed exceptionally well and validated the effect of trauma in general and the PTSD symptoms – intrusion, avoidance and hyperarousal – in particular which appear to be independent of culture. Use of IES and observation of its performance offers an important cross-cultural validity of PTSD.

With regards to AUDIT, it was clear in the questions section, however, that the answering method, which involved figures, posed some difficulty. The other difficulty with AUDIT was counting standard drinks, which the subjects may not be sure about. Despite all of these problems, AUDIT performed well and this is consistent with its qualities reported in Bush et al. (1998).

In the ITP questionnaire, participants did not experience any difficulty. Statements in the questionnaire were straightforward as they were collected from the relevant literature (Reynolds, 1999; Human Rights and Equal Opportunity Commission, 1997; Hunter, 1998a; Atkinson, 1996; Horton, 1994; Franklin and White, 1991; Biles et al., 1989; Reser, 1989; Swan, 1992). As

most of these events are associated with participants' personal or family experiences, the content clarity and applicability was satisfactory.

Generally speaking, all instruments performed well in this study. The methodology and use of these instruments if anything led to under-reporting of trauma rather than over-reporting. This in turn resulted in lower prevalence of PTSD found in this study.

7.3. Layers of trauma

The current generations of Aboriginal people carry the effect of traumatic events that had occurred many generations past and during their own. Most of the subjects who met diagnostic criteria for PTSD had multiple exposures to traumatic events. As a matter of requirement, one event associated with PTSD had to be nominated. In this process it was evident that the subjects were trying to identify a particular and distinguished event from many of these with a high importance. Childhood traumatic experience was nominated by 18.6% (n=41) of subjects. In the group of child sexual abuse, 86.1% of this group were also exposed to sexual assault as an adult. All 27.6% who were physically abused as a child and 16.3% sexually abused children fell within the alcohol abusing population. This is again pointing to the existence of self-medication. These fit into Atkinson's (1999) explanation of the population with mental illness as referring to childhood trauma. This creates an urgent need to assist those who were exposed to childhood

traumatic events and suffering from the various consequences. Prevention of recurrence of these events must be addressed.

Traumatic experiences of adults include violence (as victims or perpetrators), confrontation with the mainstream law enforcement agencies and domestic violence and motor vehicle accidents. Other adult trauma includes learned traumatic events such as the destruction of culture, confining of Aboriginal people on reserves and missions, the stolen generation, and the massacres and killings.

The rate of violence found in this study is consistent with the rates reported in various other documents (Crime Research Centre, 1999). In this study, 43% reported being subjected to domestic violence, 52.5% were threatened with weapons and 55.2% were threatened without a weapon. Furthermore, 28.5% of subjects were assaulted by 'police during arrest'. These form the background of a community sample that is respectively preoccupied with issues such as destruction (82.8%), dispossession of land (84.3%) and racism (77.4%).

It is no wonder that these traumatic events are prevalent in these communities. The current approach to addressing these issues is strongly linked with past policies rather than empowering the Aboriginal people to manage these issues. For example, child welfare groups are the most feared government agencies that remind them of the past. Peters (1995) highlighted the preoccupation of the victims and survivors of the stolen generation for their children's safety; the fear of welfare agencies taking away their children. For example, for a welfare officer working with parents who are suffering from

alcohol-related problems and domestic violence, transferring children to foster care takes precedence over long-term outcomes. In reality, however, this does not address or solve the problem. The parents are most likely to continue drinking excessively, most likely to engage in violence and most likely to blame themselves as being “incapable Aboriginal parents” as it was said when the removal of children was official government policy (Franklin and White, 1991; O’Shane, 1995; Biles et al., 1989). The policy formulation and its implementation need to be aimed at empowering Aboriginal people and allowing them to use their wisdom and skills to reduce violence.

Repeated exposure to traumatic events has proved to be a risk factor for PTSD. The critical issue in this study is that the repeated exposure to traumatic events in this population is very high. None of the subjects who reported exposure to traumatic events had only one stressor. In other words, subjects who met the DSM criterion number one for PTSD have reported multiple exposures. Repeated exposure to stressors such as conflict with police, arrests, being jailed and jailing of relatives, deaths of family members, or worsening conditions of self or other family members, are common.

A broad range of violence in these communities reflects less than adequate policing, which may result from a gross misunderstanding between a policing approach focused on the mainstream policing principles and Aboriginal culture. On the other hand police are entering a very violent subculture without adequate training and current policing practice exacerbates the frequency of violence. The Crime Research Centre’s study (1999) found the high rate of police contact with persons of Aboriginal

background must ring alarm bells about the policing strategy in Aboriginal communities. The history of violence, neglect and oppression is evident in the socio-cultural fabric of these communities and policing needs to have a non-violent conflict resolution approach than otherwise found in this study (refer to Tables 6 to 9).

The PTSD onset age, which shows 69.1% of all cases occurring before the age of 21, is evidence that traumas occur early in life and disrupt normal adulthood. The social role of trauma in this community cannot be ignored. A total of 97.3% of the study population was exposed to traumatic events. A minority but significant group did not develop PTSD, and they are trying to survive without resorting to alcohol abuse. As they are living in a subculture of traumatised people attempting to cope by suppressing their feelings with alcohol, those who do not have the disorder are likely to copy the coping strategies used by those who have PTSD. The higher rate of PTSD symptoms, intrusion 76.9% (170) avoidance 78.7% (174) and hyperarousal 90.04% (199) shows that the majority of the population has subclinical PTSD, which could be associated with alcohol consumption.

7.4. Notion of trauma in Aboriginal communities

Trauma in these communities is best understood in the context of family and community rather than the individual-centred western approach. It seems that this is where misunderstandings about Aboriginal trauma is taking place. From the western point of view, the emphasis is on the individual while

in Aboriginal culture the emphasis is placed on the whole family and community.

Aboriginal trauma is embedded in history and looking at it through this historical perspective can allow us to understand it better. In addition, looking at it through the victims' perspective gives an even clearer picture of Aboriginal experience. Socio-economic disadvantages and the various events that have occurred in the past form the reality of trauma in Aboriginal culture. When one knows that he or she was removed or his/her mother, father, brother, sister was removed as a child, and yet has to face many more traumatic events every day of the week, every week of the month and every month of the year, will add to the layers of trauma. One of these may be significant at any given time but addressing a particular event would not resolve the problem unless all experiences are dealt with collectively.

What non-indigenous people may regard as not traumatic is very traumatic and has a serious impact on Aboriginal people's life. Western notions of trauma such as rape, violence, motor vehicle accidents, natural disasters, etc. are equally traumatic for Aboriginal people as well. The challenge to the western concept of trauma and hence to nosology is that the Aboriginal concept adds a new dimension. These are the events that may have occurred well before the subject was born and still affect the current generation. Most Aborigines living today did not experience events such as dispossession and destruction of culture, but were born into a dispossessed and battered culture (Reynolds, 1999; Hunter, 1998a, 1998b; Franklin and

White, 1991). These events have therefore had a serious impact on the current generation.

7.4.1. The response of Aboriginal culture to traumatic exposure

In anticipation of traumatic events culture is always prepared to provide the necessary support and offer a protective mechanism to its members. Such a mechanism promotes closer association and cultural identity; in turn by being a member of the cultural group, individuals receive a protective shield from a broader community in the event of a disaster (McFarlane, 1996). Cultural limitations in handling certain events and providing support to its members not only exposes the individual to danger, but also undermines the culture and its significance to its members (Pearson, 2002). Protected by the isolation of their continent, it seems that Aboriginal people did not experience any major conflict prior to the Europeans' arrival over two centuries ago (Reynolds, 1999; Franklin and White, 1991; Stanner, 1979). The European settlement took them by surprise and subsequent attacks on Aboriginal culture and disruption of family lives did not allow such cultural mechanisms to develop. It merely diminished the existing cultural mechanisms that kept Aboriginal people together for an estimated fifty thousand years and removed whatever resilience they had (Pearson, 2002; Franklin and White, 1991; Biles et al., 1989).

Limited experience in dealing with major conflicts meant that Aboriginal people were poorly equipped to resist effectively the overwhelming forces

applied both to their cultural structure as well as to their physical being and environment. Hunter (1993a) noted that when alcohol problems emerged, traditional Aboriginal law as represented by Aboriginal elders could not deal with a drunken person, because alcohol-related problems were new to Aboriginal people. Furthermore, Pearson (2002) proposes the need to rearticulate Aboriginal law so it can deal swiftly with problems of alcohol and violence.

Dealing with western culture induced traumatic events or events that are associated with alcohol or states of drunkenness, which are alien to Aboriginal tradition. It becomes even more difficult when a dominant culture is offering a solution that contradicts traditional Aboriginal law. Pearson's (2002) proposal is an appeal to all Aboriginal communities where alcohol and related violence are a major concern. However, such an approach outlined in Pearson's document is likely to face resistance from civil libertarians.

7.4.2. PTSD as a challenge to Aboriginal culture

With diminishing cultural power, including that of the role of healers in the face of more sophisticated medical intervention, conditions arising as a result of exposure to traumatic events pose a serious challenge to Aboriginal culture. To remain relevant to its members, Aboriginal culture needs to develop a framework in which it will reach out to its members at times of personal and collective crisis. However, when a dominant culture has the

means to respond effectively to disaster and tragedy, a minority culture becomes irrelevant not only to outsiders but also to its own members.

To survive, Aboriginal culture needs to incorporate issues that are relevant to its young people. Increasingly, young Aborigines are seeking help from the mainstream services, but yet continue to be misunderstood due to cultural barriers. They may not utilise Aboriginal resources due to their own limited knowledge about traditional Aboriginal life. Similarly, in the mainstream system they may not get an appropriate service due to cultural barriers and pre-existing assumptions that influence the attitudes of the practitioners. These are one of the groups of people more at risk than others due to their age, not understanding and not being understood by both their own culture as well as the mainstream culture. Treatment, rehabilitation and trauma prevention strategies need to be given a high priority for this group.

The serious challenge comes with sexual abuse and domestic violence. The former is more continuous while the latter has forced a significant group of influential Aboriginal people to become involved in preventing it and providing support to victims. The former, however, is entrenched in a culture where marital arrangements override the woman's rights and younger women are promised to older men at the expense of individual rights. This system of arranged marriage is promoting sexual violence against women. Victims of sexual violence are constrained to utilise the mainstream legal system, in which the perpetrator may not come back to the community after serving his prison term. Traditional law may seek payback on the victim - the woman.

7.5. Traumatic memory: pathway to PTSD

A little over a century ago, Janet (1901) was confident that certain events make a pathogenic idea in the form of traumatic memory and this notion has been accepted in current PTSD theory. McFarlane et al. (2002) also highlighted the importance of traumatic memory, indicating a clear link between core PTSD symptoms and transmission of information in the brain. Supporting this line of argument, this study has confirmed that PTSD occurs if the victims have a traumatic memory and without it, exposure to traumatic event alone would not lead to the development of the disorder. The group of people who were exposed to traumatic events and the subgroup of this population who developed PTSD, explains the importance of traumatic memory.

Furthermore, a high level of participants' preoccupation with dispossession of land and culture, removal of children and racism, putting aside the major problems that the study population is facing, supports Janet's notion of traumatic memory. Janet stressed that traumatic memory can develop without "any obvious material [physical] injury" (Janet, 1925). He insisted that those events, which did not cause an obvious injury, could have the same impact as those causing a material injury. The loss of land, destruction of culture and discrimination cannot cause a real physical injury. However, there are obvious spiritual and emotional injuries and these may contribute to exposure to events that could result in real injuries and subsequent poor coping skills and equally to poor resilience factors.

Therefore, these events have two effects: 1) the events themselves are traumatic; and 2) their occurrence weakens the person's capacity to deal with subsequent traumatic events.

As indicated in the IES results, subjects who have symptoms of PTSD are well above the number of participants who met diagnostic criteria for PTSD. It could be argued that if traumatic memory is the pathway to PTSD, why is the number of subjects who met the diagnostic criteria for the disorder less than those who have traumatic memory or symptoms of PTSD? One explanation to this question is that in spite of the existence of traumatic memory, some subjects did not meet the diagnostic criteria because they did not meet the disability criterion of the PTSD. The second explanation is that the subjects may view the high scoring events in the context of their current socio-economic disadvantage, occurring in the form of traumatic events such as rape and violence. Their disability is associated with these events rather than the historical events which scored high in ITP and are the reason for a high rate of IES scores. The latter is supported in this study as shown; in the absence of present traumatic events, historical traumas (except the stolen generation) are not associated with PTSD.

7.6. The relationship between alcohol and PTSD

A high rate of alcohol abuse (73.8%) and alcohol dependence (33.5%), found in this study is strongly associated with the traumatic experiences and prevalence of PTSD. Further analysis of these findings shows that 68.1% of

subjects with alcohol abuse have PTSD. Furthermore, PTSD age of onset preceded alcohol in 67.6% of subjects who have alcohol abuse as a comorbid disorder with PTSD. The remaining 33.4% who show that the onset of alcohol abuse preceded PTSD are also within the group of subjects who had prior exposure to traumatic events. The latter can be explained as follows: 1) the possibility of alcohol as treatment for pre-existing traumatic memory; and 2) alcohol as responsible for the traumatic event that may have led to the development of PTSD. In either case the explanation falls into the theory of self-medication. Overall, these findings confirm the hypothesis of alcohol abuse as self-medication to suppress the symptoms of PTSD.

These findings and explanation of alcohol abuse as self-medication are consistent with the findings of other studies that have identified a close link between alcohol abuse and PTSD (Chilcoat and Breslau, 1998; Roszel et al., 1991; Kulka et al., 1990). Roszel et al. (1991) found 33%; Kulka et al. (1990) 73%, the Centre for Disease Control (1988) 39% of subjects with PTSD had alcohol abuse disorder. McFarlane (1998) identified 30% of volunteer fire fighters with PTSD had increased their alcohol consumption in contrast to 9% of those without PTSD. Fullilove et al. (1993) found that in a group of women drug abusers, 59% of them suffered from PTSD. Emphasising alcohol as self-medication (Nishith, Resick and Mueser, 2001) found that suppressing the hyperarousal symptoms associated with PTSD is the main drive for female rape victims to drink alcohol. The identification of this association can provide a major step forward in preventing retraumatisation as it is increasingly becoming clear that alcohol contributes to violence.

The group of subjects who have alcohol abuse disorder without having other psychiatric disorders also provides another explanation which supports the view that alcohol is a form of self-medication. The striking point is that in this group, 97.3% of subjects were exposed to traumatic events and have PTSD symptoms: intrusive thoughts and avoidance. One explanation for their drinking behaviour is that they may be trying to suppress these PTSD symptoms. If this is the case, then alcohol in fact may have offered them a remedy and could be the reason why a significant group of the sample dropped out in the diagnostic criterion 'F' for PTSD. Contrary to the above explanation, it may be argued that their drinking behaviour may have contributed to their traumatic encounter in the form of violence. If this is the case, this also explains that alcohol has suppressed the symptoms of PTSD.

7.6.1. Social role of PTSD in alcohol abuse

The increased level of exposure to traumatic event and high prevalence of PTSD in these communities suggest multiple social factors contributing to a high level of alcohol abuse. While various factors such as age or adolescence behaviour can contribute to increased alcohol consumption, in the social arena, the presence of traumatised people have a key role in the increased level of alcohol consumption.

This social relationship is a risk factor for those who have no PTSD, but socialising with others who have the disorder. Utilising the effect of alcohol as a means to cope with the symptoms of trauma indicates the need

to consider the high prevalence of PTSD from wider social perspective. In other words, the high prevalence of PTSD increases the social pattern of excessive alcohol consumption. Here, PTSD is not just a risk factor for alcohol abuse for those who suffer from it, but also for others in the social environment.

On the other hand the increased level of alcohol abuse also can be seen in the behaviour of adolescents. Younger people have an increased risk of excessive alcohol consumption. This risk is doubled when the young person is affected by a traumatic event. As shown in this study 69.1% of age of onset for PTSD is under 21 years of age, combined risks to alcohol abuse.

7.7. Shared aetiology of Depression and PTSD: links to suicidal thoughts

The shared aetiological origin of depression and PTSD can be deduced from the majority of subjects (97.3%) who have had exposure to traumatic events. While depression has been a major concern for mental health practitioners in Aboriginal communities, little attention was given to PTSD despite the role of trauma in the development of the two disorders. This study has identified a shared aetiological factor, trauma, as a contributing factor to development of both PTSD and depression. However, this should not be confused with the fact that the criterion of exposure to a traumatic event is not essential for depression, whereas it is a prerequisite for PTSD (APA, 1980, 1987, 1994, 2000).

This shared aetiological factor was also identified in a study elsewhere. A study of 211 people in Hadassah emergency room in Israel who were exposed to a traumatic event (Shalev et al., 1998) found this partially shared aetiology for these two disorders. In that study, it was found that while 17% met diagnostic criteria for PTSD, 14% were diagnosed with major depression. A similar pattern has been noted in this study. The total of 22.2% of subjects met diagnostic criteria for major depression. This includes 20% for major depression (recurrent) and 2.2% for single episode. In addition to this, 1.8% also met diagnostic criteria for dysthymic disorder. All of the subjects who met diagnostic criteria for major depression disorder were exposed to traumatic events. This shared aetiological factor offers an important strategy for treatment, management and preventions of these disorders.

An important issue in this shared aetiology is suicidal thought, which was reported by 25.3% (n=56) in ITP and 69.6% (n=39) of those confirmed in CIDI with the subjects who met diagnostic criteria for major depressive disorder. Furthermore, 28% of subjects with major depressive disorder (recurrent) and 2.5% of subjects with major depressive disorder (single episode) have PTSD. The comorbidity of PTSD and major depression can explain the possible link between suicidal thoughts and PTSD.

7.8. Socio-demographic variations

Socio-demographic variations within groups suffering from various disorders indicate that being a woman increases the risk of trauma. In the

PTSD group, 65.6% were women while the men constituted 43.4%. This difference may be attributed to slightly more women (53%) than men (47%) being subjects in the study. Clearly, however, the above ratio shows that women are more likely to suffer from PTSD. Various PTSD studies found that women are more vulnerable than men due to the role of men in conflict. The other possible explanation of this higher ratio of women being prone to PTSD may lie in the traditional view about men as being "strong" both physically and emotionally.

It could also be argued that men are able to expel their frustrations better physically than women. On one hand, women have a better social network, which gives them more private space to share their experiences with each other. On the other hand, however, family responsibilities such as caring for children and the whole family may have put their ability to the test. They then find out that they are not functioning effectively as a result of traumatic experience.

The other important socio-demographic variation found in this study is that risks varied according to a certain age group. Younger people appear to be more vulnerable to alcohol abuse as well as PTSD. A possible relationship between these three variables is interwoven. One explanation is that young people engage in alcohol consumption as a way of experimentation and assertion of their independence. As less experienced drinkers, they are likely to reach harmful levels of drunkenness very easily or not be able to stop when they should. The second explanation is that youth is also associated with aggression in a way of self-assertion and independence.

The third explanation is that alcohol leads to violence and violence leads to alcohol. In either case, subjects in the younger age group show that they are vulnerable and more likely to suffer from PTSD and alcohol abuse than older adults.

7.9. Role Models

The pretext that was used in the removal of Aboriginal children was that “Aboriginal parents are not capable of caring for their children” (Biles et al., 1989). Contrary to this outdated belief this study found that in spite of socio-economic disadvantage, a history of state-sanctioned violence and destruction of a culture, there are Aboriginal role models who can be used to assist those who have been damaged by the effects of colonialism.

The identification of a group with a traumatised background, but not resorting to alcohol as a means of relieve to their troubled thoughts, offers a collective role model that can be utilised to combat the problem and assist those in need of help. It was not the focus of this study to understand how this group coped with trauma and managed to avoid alcohol. Further exploration of this group of people would provide a useful tool for health services and other agencies working in these and other similar communities. Use of this group of people as a driving force in treating and rehabilitating sufferers of PTSD would yield positive results. Their coping skills need to be recognised and promoted. Programs to prevent PTSD can also use this group effectively.

7.10. Significance of the findings

The Aboriginal people's traumatic experiences have been reported widely (Reynolds, 1999; Hunter, 1998a; Atkinson, 1999; Franklin and White, 1991; Stanner, 1979). However, the extant literature makes no reference to PTSD as a direct result of exposure to traumatic events (Atkinson, 1990a, 1990b, 1999; Hunter, 1995a, 1995b, 1996, 1997, 1998a; Atkinson and Ober, 1995). Similarly, the literature reports high rates of alcohol abuse and violence, but stops short of identifying their link with traumatic experiences and resultant PTSD (Blagg, 1999; Hunter, 1993a). Generally, the literature on Aboriginal people's traumatic experience has been limited to description and failed to make a link between traumatic exposure, the current rate of violence, prevalence of PTSD and alcohol abuse.

In contrast, this study offers a comprehensive picture of Aboriginal people's traumatic experience, and its relationship to PTSD, alcohol abuse and violence. The study has identified types of traumatic events, established the rate of exposure to them, and the prevalence of PTSD and their relationship to alcohol abuse.

The study found a higher rate of exposure to traumatic events, (97.3%), higher rate of PTSD prevalence (55.2%), and higher rate of alcohol consumption in these communities (96%). Further analysis has shown that 73.8% of subjects have alcohol abuse disorder and 33.5% have alcohol dependence disorder. Linking this alcohol-related disorder to traumatic experiences and PTSD, 91% of PTSD positive group also have also alcohol

abuse disorder. These are well above the rate for the general population – PTSD 1.3%, alcohol abuse 1.9%, and alcohol dependence 4.1% (ABS, 2000). Therefore, it can be stated with confidence that this finding proves the original hypotheses of this thesis are correct.

The higher rate of exposure to traumatic events found in this study is higher than the prediction of (Yehuda and Shalev, 1998) which estimates that 90% of the population in United States of America is likely to be exposed to a traumatic event at least once in their lifetime. Furthermore, in this study all subjects who reported exposure to traumatic events have had multiple exposures, indicating the vulnerability of this population to PTSD. More than half, 55.2% (n=122), of the study population met the DSM diagnostic criteria for PTSD. The study puts PTSD at the top of list of most psychiatric disorders experienced by Aboriginal people.

Is this prevalence rate accurate? As there has been no previously reported specific PTSD prevalence in this community, one can only wait until another study comes up with a possible alternative prevalence rate. The author's experience in these communities shows that the PTSD rate found in this study is under-diagnosed as a result of under-reporting of the rate of exposure to traumatic events. For example, a 15-year-old girl was raped and became pregnant as a result of the incident. Her pregnancy was revealed apparently just three weeks before she gave birth to her first child. When her father found out that she was pregnant because of rape, he attacked the alleged boy, who denied raping the girl. Fighting between the two families further complicated the matter and added more distress to the girl. This

woman who was 18 at the time contacted the author, stating that she worried her father may be attacked as a pay-back for what he did to the alleged boy. She said that she feels guilty that she was the cause of the problems her father had to face. She stated that she was no longer worried about what the boy did to her, but about her father. These types of suppressed feelings may exist widely in these communities and likely to be reported in any future studies. Therefore, future research in this field would find a higher rate of exposure to traumatic events and higher prevalence of PTSD and consequently, a higher rate of alcohol abuse than the findings of this study.

In spite of the existence of the disorder, the mental health service has given little attention to their clients' traumatised background of these communities. This may be partly to do with the history of trauma that stretches three generations back and is regarded as irrelevant to the current circumstances. In addition, the overt presentation of alcohol and evidence of its sequelae in the form of domestic violence, violence in general and self-neglect are taking precedence over the underlying issues of trauma and PTSD. This highlights mental health professionals' limitations in understanding the effect of transgenerational trauma and its aetiological role in the development of various psychiatric disorders including PTSD. The burden of transgenerational trauma on the current Aboriginal generations has been substantially highlighted in the literature (Pearson, 2002; Atkinson, 1999; Hunter, 1998a; Biles et al., 1989).

Consistent with the Aboriginal people's culture, older generations have by way of story telling passed on to the younger generations their traumatic

experience (Human Rights and Equal Opportunity Commission, 1997; Peters, 1995; O'Shane, 1995; Biles et al., 1989). This was done in an attempt to explain the reasons for the current predicament of the Aboriginal people. In other words, the current socio-economic disadvantages, disorganisation and powerlessness of Aboriginal communities, poor safety for children and the elderly as a result of a high rate of alcohol abuse and violence, are the result of the historically disadvantaged position of Aboriginal people. The high rate of alcohol abuse found in this study shows that 73.8% (n=163) is a reflection of this historical disadvantage. This finding is consistent with those findings of other studies; Sambo (1988) found 67% and Smith, Singh and Singh (1987) reported 87% alcohol abuse in the Aboriginal population.

With regards to the high rate of alcohol abuse found in this study, one explanation rests with a high exposure rate to traumatic events, which is 97.3% (n=215). It is likely that alcohol is a 'remedy' for distressing thoughts without going through intrusive professional assessment to obtain help. It serves here as a readily and easily accessible means to *dampen* emotional anguish and at the same time encourage socialisation that comes during its consumption. As pointed out by Hunter (1993a) socialisation plays an important role in alcohol consumption.

The availability of time to drink while socialising is obvious in the community where the Aboriginal unemployment rate is 71.5%. Lack of employment opportunity increases the risk of alcohol abuse and violence, which can bring forward the memory of old trauma. Begic and Jokic-Begic (2002) highlighted the importance of education, family and marital status, and

social support as being protective factors against PTSD. In these communities where 84.2% of the Aboriginal study population had no qualifications the disadvantage is obvious.

7.10.1. Broad relevance

Any reader of this thesis would pose the question whether this is applicable to all Aboriginal people. This finding offers a significant input into the clinical practice on mental health programs in Aboriginal communities. So far the focus has been in depression and alcohol abuse without considering the contributing factors on these disorders. Finding a high level of exposure to traumatic events and high prevalence of PTSD in the communities may be utilised as treatment and management guidelines for mental health programs.

The law enforcement agencies should refocus their efforts also to minimise the high rate of violence. Rehabilitating the community needs to focus on attacking the core problems. Targeting trauma and helping the community to confront the past systematically in order to be able to deal with current reality needs to be a central point. The current approach of urging Aboriginal people to 'forget the past and get on with life' (The West Australian, 2004) cannot be effective.

The past cannot be forgotten when the present is negative and the future offers little hope. Victims of trauma made clear that they could not only forget the past but also they had passed onto their children by telling what had happened to them (Peters, 1995; O'Shane, 1995; Biles et al., 1989). The

health professionals dealing with Aboriginal people and individuals involved in the formulation of policy and programs need to understand the experience of Aboriginal people from their perspective.

As the Aboriginal people's experience across the nation is shared, it can be stated that these findings are likely to be repeated in a similar population elsewhere in this country. As experiences are the same, use of these instruments would generate equally the same response from a similar subjects elsewhere. The ITP recorded specific Aboriginal experience on the basis of factual historical documents and events that are currently occurring. These traumatic events provoked the PTSD symptoms that are captured by IES and significantly confirmed by CID1, in that more than half of participants met diagnostic criteria for PTSD. Therefore, it is very likely that similar experiences by a similar group of people will generate the same responses. The findings of this study may appear to be limited in their applicability to other populations. However, the nature of traumatic events is shared across the nation but may vary in its intensity; therefore the broader relevance of these findings remains strong.

7.10.2. Generalisation beyond culture

The findings of this study have ramifications beyond Aboriginal culture. It refutes the assumption that if the community always lived with violence as a part of daily life, PTSD must be regarded as an invalid diagnosis. For example, Summerfield (2001) argues that PTSD is a western cultural

construct and affects mainly the western people. This line of argument attempts to deny services and much needed research in the population outside of western culture. Consideration of PTSD being a western social and political construct and questioning the validity of the diagnosis in ethnic communities who experience equally distressing traumatic events has greater consequences well beyond the medical field. Summerfield (2001, 95) states:

One striking development ... has been the global spread of the use of this diagnosis by humanitarian programmes. It is promoted as a basis for capturing and addressing the impact of events like wars regardless of the background culture, current situation, and subjective meaning brought to the experience by survivors.

Contrary to Summerfield's views, this study's findings prove that the impact of trauma is not limited to western socio-political and socio-cultural experience. Certainly, the impacts of events such as war, state-sanctioned political violence, natural disasters, etc. are not culturally limited. Victims and survivors of such events are likely to feel the same psychological effect regardless of their cultural background. Sadly, however, Summerfield (2001) appears to accept the authoritarian rulers who had butchered their fellow citizens and silenced survivors at gunpoint (Tola, 1998). As a result, PTSD is not reported, because reporting it as a consequence of the violence in which the state is involved will certainly pose a further threat to the person's security and physical integrity. Summerfield (2001) seems comfortable with this outcome.

This view, the mixing of a tactical response that humans employ when faced with immediate threat to one's life or physical integrity, legitimises political sanction to stop people from expressing their psychological anguish

and pain following exposure to personal and collective disaster. Summerfield (2001) contended that 99% of PTSD diagnoses found in his reference to a survey on war-torn Freetown, Sierra Leone, supported his line of argument, but it turned out to be otherwise. His concern appears either fear of a blown-out epidemic or possible economic cost that would follow such a massive diagnosis of the disorder. Health professionals must fulfil their duty of care by providing all necessary assistance to the victims of disaster.

The argument that the construct of PTSD in these communities is misplaced because of the very high prevalence is paradoxical. Western governments have repeatedly failed to intervene in communal violence in failed states. As Ignateff (1998) argued, one reason is the failure to have a sense of moral obligation to what we see in the media. Summerfield's disavowal of the relevance of PTSD in these communities comes dangerously close to allowing the west to have a free conscience for its gross moral neglect. Epidemiological research (McFarlane, in press) has established in non-compensation seeking populations the burden of disease associated with PTSD and the suffering with the recurrence of the past brings. Other communities, because they are poor and different in customs and appearance, are not immune to equal suffering. Their plight deserves equal acknowledgement at an individual level as well as that of the community. Denial to acknowledge the impact of trauma, PTSD, on culturally different groups of people amounts to denial of much needed research, diagnosis, treatment and rehabilitation.

This sets a potential precedence for the gross neglect of human suffering which can be an antecedent of an environment where human rights violations occur. Such a situation in the 21st century is possible. It reminds us of the likes of R.W. Felkin, Natalie Robarts, and H Pitts who in the late 19th and early 20th century argued that Negroes, including Aborigines, feel pain to a lesser extent than Europeans (Reynolds, 1996a). Such a sentiment creates an environment where to inflict pain without the normal conflict of conscience. People who do not feel pain to the same degree potentially demand less regard

What is also learned from this study is that regardless of cultural differences, the human response to an overwhelming traumatic event is the same. The findings of core PTSD symptoms - intrusive thoughts, avoidance and hyperarousal - are a good indication of the universality of human responses. For example this pattern of reaction has been observed in the poorest province of China after a major earthquake where there was no cultural awareness of the syndrome (Cao, McFarlane and Klimidis, 2003).

In this study, a number of important factors emerged in terms of the trauma experienced by Aboriginal people. From a global point of view, the important point is that this study offers a springboard to depart from the narrow view that PTSD is a western construct (Summerfield, 2001). There is a reason to accept the universality of the disorder. The findings have confirmed that the effect of exposure to traumatic events is universal and the symptoms are the same. The difference lies in the psychophysiological

manifestation of the symptoms being expressed within cultural norms and rules.

Failure to observe PTSD to date in Aborigines amounts to a gross neglect on the part of the relevant professions, and has contributed to a misunderstanding of their situation. Prevention of PTSD which requires dealing with traumatic events such as domestic violence, child abuse, violence in general, etc. and other contributing factors such as socio-economic disadvantages would have a greater implication beyond PTSD in improving overall condition of Aboriginal people. Such an approach would require collaboration between the various sectors and involvement of Aboriginal people.

Chapter 8: Conclusion and Recommendations

8.1. Conclusion

In conclusion, the study used four different instruments to collect quantitative data from Aboriginal samples in two remote towns in the Central West Region of Western Australia. A total of 221 subjects aged 18 to 65 years old participated in the study. This accounted for 32.6% of the total Aboriginal population of the two towns and surrounding communities and 96.5% of the relevant age group.

The study has found 97.3% (n=215) of subjects were exposed to traumatic events, 55.2% (n=122) of participants have PTSD, 73.8% (n=163) of subjects have alcohol abuse disorder and 33.5% (n=74) have alcohol dependent disorder. Furthermore, 20% (n=44) of subjects met the DSM-IV criteria for major depressive disorder (recurrent), 2.3% (n=5) had major depressive disorder (single episode), 1.8% (n=4) have dysthymic disorder, 23.5% (n=52) of subjects abuse cannabis, 5.9% (n=13) of subjects were cannabis dependent and 2.7% (n=6) of participants have abused inhalant.

In the 55.2% (n=122) of PTSD positive subjects, 91% (n=111) of these subjects have alcohol abuse disorder. This accounts for 68.1% of the alcohol abusing population. Furthermore, in the group of subjects who have PTSD and alcohol abuse as a comorbid disorder, onset of PTSD preceded in 67.6% of subjects, while the onset of alcohol abuse preceded PTSD in 32.4% of the

group. Analysis of age of onset for PTSD and alcohol abuse shows that 69.1% of all PTSD cases and 67.1% of all alcohol abuse cases' onset is before the age of 21 years old.

Comparisons of the findings of this study with the National Survey of Mental Health and Wellbeing conducted by ABS (2000), shows that the prevalence of PTSD is significantly higher in these communities than in the general population. In this study, PTSD is 55.2% compared to 1.3% recorded in the ABS (2000) survey. A similar pattern is noted in all other disorders: alcohol abuse is 73.8% in this study compared to 1.9%; and alcohol dependence is 33.5% compared to 4.1% in the ABS (2000) survey. This is set against the background of a higher rate of exposure to traumatic events in these communities than the population generally. Exposure to physical attack is 40.7% in these communities compared to 12.9% for males and 5.4% for females reported in the ABS (2000) survey on Mental Health and Wellbeing.

A broad interpretation of the findings of this study indicates that while differences are present in the ways people respond overtly to events of a catastrophic nature, the psychological responses - fear, helplessness and horror - remain the same and the core symptoms of PTSD also do not differ on the basis of culture. However, the way individuals cope, respond to and handle the symptoms of PTSD are shaped by culture and community practices.

In conclusion, these findings prove the original hypotheses summarised here that: the rate of exposure to traumatic events will be higher in these communities than the national average; the prevalence of PTSD and

the rate of alcohol abuse will be higher in these communities than the population prevalence; there is a positive correlation between exposure to traumatic events, PTSD, alcohol abuse and retraumatisation; and alcohol is abused as self-medication to suppress symptoms of PTSD.

8.2. Recommendations

There is a need to redirect the focus of mental health services to treat and rehabilitate victims of trauma and sufferers of PTSD in these communities. The focus on rehabilitation needs to be driven from the Aboriginal cultural perspective - Aboriginal elders and positive cultural practices have a role to play and need to be taken into account in the mental health policies and programs development. Furthermore, Aboriginal people need to shift their focus to the current realities and future direction of Aboriginal society. Having said that, the importance of the past must not be ignored; past events are responsible for most of the present predicament of these communities. However, the past needs to be dealt with systematically while the focus remains on the present and future.

As demonstrated in the literature review and findings of this study, the Aboriginal people's problems in general and traumatic experience and its effects in particular are multifaceted and cannot be addressed by a single department or sector. The economic, social, political and judicial sectors have all contributed their share towards the current disadvantaged condition of Aboriginal people (Biles et al., 1989; Human Rights and Equal Opportunity

Commission, 1997). Health professionals' interventions alone would achieve very little without the collaboration of education, employment, community development, justice, and other government and non-government agencies, and a positive political gesture from state and federal governments. Targeting trauma and its effects certainly would play an important role in reducing the prevalence of PTSD and alleviate the psychological pain and suffering associated with generations of traumatic experiences.

In addition to the above points, the last hundred or so years of patriarchal intervention has delivered to Aboriginal people more pain than relief and achieved insignificant improvements, if any at all (Biles et al., 1989). This is not to deny some improvement in the health sector during the last thirty years, which can be attributed to overall economic development. In turn this contributed improvements in the health care system but was not as a result of a specific government intervention aimed at solving Aboriginal problems. On the basis of the findings from this study, the following recommendations are made.

8.2.1 Further research

A PTSD focused study with a larger population sample is necessary to confirm and build on the findings of this study. Future research needs to consider the following issues:

8.2.1.1. A large nationally representative sample

This would require covering all Aboriginal communities - homeland, rural-urbanised and urban Aborigines. With this type of sampling process, one must expect the need to gain the cooperation a number of departments including ATSIC or any future organization that would represent Aborigines, Aboriginal Medical Services and most importantly, the local Aboriginal community organisations. To gain access to urban Aborigines and establish a positive identity, cooperation with urban Aboriginal organisations and Centerlink can be helpful to identify Aboriginality. Such a large-scale project needs to have sufficient human resources and financial backing with a level of expertise and experience to carry out the investigation. It is also important that a team of investigators have a positive working relationship with Aboriginal people.

8.2.1.2. Research funding

Setting up research grants from state and federal governments to investigate PTSD and its relationship to other psychiatric disorders and substance abuse needs to be considered seriously. There is a need to establish prevalence of PTSD in indigenous communities and this can be achieved only by engaging in continuous research. Further research needs to be conducted with appropriate financial backing

rather than a struggling academic (higher degree students) with little financial support.

8.2.2. Prevention of PTSD

PTSD prevention has two steps. Step one is prevention of traumatic events; and step two is early intervention following exposure to traumatic events.

8.2.2.1. Prevention of traumatic events

It is over a hundred years since Pierre Janet concluded that certain events result in serious psychological problems. Increasing prevalence of psychiatric disorders in general and PTSD in particular are linked to increasing incidence of traumatic events and violence. Reducing the incidence of traumatic events will contribute to reducing the prevalence of PTSD as well as other psychiatric disorders.

This task would only achieve a marginal result unless it was carried out in collaboration with various sectors including health, justice and law enforcement agencies. Each sector would have a specific role to play in the prevention of PTSD, targeting domestic violence, child abuse and neglect, juvenile-crime and other general violence associated with alcohol.

Appropriate responses to child abuse and domestic violence would achieve substantially significant positive outcomes as much as

early intervention. The dilemma of this is for some individuals and organisations to take a strong stand against violence. This originates from a misconception about violence and alcohol abuse in Aboriginal communities. Many think that speaking out against child abuse, domestic violence, etc. in Aboriginal communities is being critical of Aboriginal culture. This sort of approach, turning a blind eye to violence in Aboriginal communities, has resulted in the failure of system. For example, the education system has failed Aboriginal children by not reporting child abuse and neglect – associating violence with Aboriginal culture. This amounts to regarding Aboriginal culture as a culture of violence. There is well-documented evidence showing that Aboriginal people are caring and loving parents (Reynolds, 1996a). The root cause of violence lies with colonisation and the resulting destruction that Aboriginal people were exposed to in the past two centuries. Ultimately it can be stated that violence in Aboriginal communities is a legacy of colonisation and there is a need to respond urgently to address it.

8.2.2.2. Role of law enforcement agencies in prevention of PTSD

Law enforcement agencies have an important role in reducing crime and the rate of violence. Historically, the relationship between police and Aboriginal people has been very negative and marked with

controversies (Biles et al., 1989; Wood, 1927). It is one of the major public relations hurdles the police forces confront in this country.

Police officers need to be trained in non-violent conflict resolution. The findings of this study show that the policing style in these communities involved confrontation and is traumatic. Improved relationships with Aboriginal elders and respect for Aboriginal culture would be the key to policing Aboriginal communities. It must be noted that ignoring violence in general, child abuse and domestic violence in particular cannot lead to respect for Aborigines. These are not a part of Aboriginal culture and must be eradicated in partnership with Aboriginal communities.

8.2.2.3. Early intervention

Early intervention needs to be a collaborative effort between general health services and specialist mental health programs. Assessing Aboriginal persons seeking medical attention following exposure to a traumatic event would allow an early assessment opportunity to take place. This means that the early sign of PTSD or a person's vulnerability to it would be established and follow-up care can be arranged.

The age of onset of PTSD which shows that over two-thirds of the subjects with the disorder have developed it before the age of 21 is indicative of early exposure to traumatic events. It has made the group

vulnerable to exposure to subsequent traumatic events, PTSD and alcohol abuse.

8.2.3. Mental health services need to focus on treatment and rehabilitation of PTSD sufferers

Improved diagnosis is a key to delivering effective treatment and rehabilitation. Mental health service practitioners need to treat PTSD as the number one psychiatric problem affecting Aboriginal people. The current diagnostic and treatment focus on depression and alcohol-related disorders needs to be redirected to include PTSD. Traumatic exposure is the fundamental cause of PTSD and also believed by many experts to have a role in the onset of other psychiatric disorders. It is widespread in these communities and causing serious psychiatric damage. Diagnosis, treatment and rehabilitation of PTSD would have multiple positive outcomes in the diagnosis, treatment and management of other psychiatric disorders.

The approach needs to be family and community focused rather than individual-based. It is increasingly accepted that mental health practice has shifted from an individual to family focused approach even in the mainstream practice. This approach needs to be reinforced in the context of Aboriginal culture, experience and environment. As traumatic experience was found to have affected almost entire communities, an identified disability of a family member needs to be treated and managed inclusive of the whole family.

8.2.4. Appropriate rehabilitation program for chronic alcohol abuse disorder

The treatment and rehabilitation of individuals who have alcohol abuse disorder needs to be side-by-side with the treatment and rehabilitation of PTSD. Aboriginal initiatives and the wisdom of Aboriginal people need to be considered seriously and given the opportunity to be tried. This may require consultation with regards to how Aboriginal elders want this problem to be addressed.

This can be sought from the group identified in this study as free of alcohol-related disorders. Identifying this group and finding out about their skills, wisdom and coping strategies, will encourage them to play a role in rehabilitation programs. Identifying the group of individuals with better coping skills and similar group elsewhere in Aboriginal communities may need to be a part of future research. Such an approach needs to take into account the overall alcohol management issues.

8.2.5. Consideration of traditional Aboriginal law in management of alcohol and prevention of violence

Aboriginal voices are increasingly expressing concerns about problems associated with alcohol and violence. This recognition is a step forward and the author believes that as they are aware of the problem, they would have a better way of dealing with it than an

imposed intervention that is formulated by the so-called experts. It is time to give Aborigines the opportunity to address alcohol and violence and other associated problems from their own perspective with assistance from the mainstream legal system. However, such an approach needs to be fully understood by the mainstream system and endorsed in order to protect the elders and others involved in its process.

On the other hand the Aboriginal approach needs to be directed towards preparing young Aborigines for the challenge of life. Approaches such as banning alcohol would amount to the government policies that prohibited alcohol to Aborigines until the early 1970s, which in turn only promoted dangerous drinking in backyard-drinking sessions (Pearson, 2002; Hunter, 1993a).

8.2.6. Improving accessibility of mental health services to Aboriginal people

The mental health services have a long way to go in order to be able to assist Aboriginal people effectively. Although many positive changes have taken place during the last decade, there is a need to do more. To have a positive impact on Aboriginal mental health, the system needs to be flexible and accommodate Aboriginal concerns. For example, some Aboriginal communities are not comfortable with the term “mental health” due to the stigma attached to it. Aboriginal people have indicated their discomfort and on several occasions

proposed 'health and wellbeing centre' as the preferred name for mental health service.

In small communities, the stigma is there that anyone seen walking in and out of the mental health services would be regarded as "mad" or "lunatic" in these small communities where everyone knows each other (Peace, 2000). Better outcomes can be delivered if Aboriginal people are fully involved and work in partnership.

Under current practice, Aboriginal people feel threatened and stigmatised. Naming services with culturally appropriate terms would encourage their Aboriginal community participation in the delivery of the service. To be specific, the name **Emotional and Spiritual Welling Centre** is offered as an alternative to the current service names in Aboriginal communities.

Involving Aboriginal "medicine men or healers" in the assessment and treatment of a psychiatric patient (if the patient or next of kin wish to do so) would also contribute to the development of trust and a working relationship between the mental health service and Aboriginal communities. Consulting family and elders before a patient is transferred to an acute setting would contribute positively to treatment seeking behaviour. The Mental Health Act needs to reflect this approach.

For individuals living in remote or rural Aboriginal communities getting treatment itself is traumatic and stressful as it involves relocation to major cities with little family assistance. A family member

should accompany an Aboriginal person transferred as a voluntary or involuntary patient for treatment in acute settings located 100 kilometres away from their home for the duration of the hospitalisation.

8.2.7. Formulation of health and social policies relevant to Aboriginal experience

The PTSD assessment, treatment and rehabilitation need to be part of such health policies and programs. It is imperative that appropriate policies and programs are developed to back-up the above recommendations. To ensure the collaboration of other departments, a broad consultation process is required at the initial stage of policy development.

The implementation of the above recommendations with appropriate policies would deliver cost effective health and social programs across Aboriginal communities. Reduction of violence would contribute to less policing cost as well as less cost in health care delivery in the long run. There is no doubt that the initial program would incur some extra cost at the start. However, the long-term outcome is worth investing in.

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Appendix A: Composite International Diagnostic Interview (CIDI)

**COMPOSITE INTERNATIONAL
DIAGNOSTIC INTERVIEW
(CIDI)**

CORE VERSION 2.1

(JANUARY 1997)

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Version 2.1 of the CIDI-Core is the third authorized version of the Composite International Diagnostic Interview (CIDI). It has been developed in consultation with numerous experts and tested in many countries. A brief history of its development can be found in the CIDI Training Manual.

The proper use of this instrument requires appropriate training of interviewers, careful editing of interview schedules, so as to be certain that data are complete, accurately coded, and logically consistent across questions, and computer scoring. The interview should be used only in conjunction with its supporting materials. These include a CIDI Training Manual, a CIDI Interviewer's Manual, and a CIDI computer diskette for data entry, cleaning, and scoring, along with its Computer Manual.

No translation of this instrument into any language should be prepared or released without the express permission of the World Health Organization, Geneva.

All correspondence (including enquiries about training, translation, and use of the instrument) should be addressed to:

Division of Mental Health
World Health Organization
Avenue Appia
1211 Geneva 27
Switzerland

INTERVIEWER'S NAME _____

INT CODE ___ / ___ / ___

ID CODE ___ / ___ / ___ / ___ / ___ / ___

LANGUAGE OF INTERVIEW _____

TIME BEGAN hr ___ / ___ /min ___ / ___

DATE DAY ___ / ___ MO ___ / ___ YR ___ / ___

SECTION A

DEMOG A1 RECORD SEX AS OBSERVED. MALE..... 1
 FEMALE..... 2

DEMOG A2 How old are you? AGE ___ / ___

DEMOG A3 What is your birthdate? DAY ___ / ___ MO ___ / ___ YR ___ / ___

DEMOG A4 Are you presently married, or are you widowed, separated, divorced, or have you never been married?

MARRIED (ASK A) 1
 WIDOWED (ASK B) 2
 SEPARATED (ASK B) 3
 DIVORCED (ASK B) 4
 NEVER MARRIED (ASK B) 5

A. IF CURRENTLY MARRIED (A4=1), NO..... 1
 ASK: Are you currently living with your YES..... (SKIP TO A5)..... 5
 (husband/wife)?

B. Are you currently living with someone as NO..... 1
 though you were married? YES..... 5

DEMOG A5 How many children have you had, not counting any who are yours by adoption or who were born dead? # CHILDREN ___ / ___

DEMOG A6 Now I want to ask you about work. In the last twelve months, how many months have you been employed? COUNT SELF-EMPLOYMENT OR SALARIED. IF NONE, CODE 00 AND SKIP TO A8. IF LESS THAN 1 MONTH CODE 01. # MOS ___ / ___

DEMOG A7 Are you employed now? NO.....(SKIP TO A8)..... 1
 YES..... 5

A. Do you work full-time or part-time? FULL-TIME..... 1
 PART-TIME..... 2

B. What kind of work do you do?

RECORD: _____

C. In what kind of business or industry are you working?

RECORD: _____

DEMOG A8 How many years of schooling have you completed? YEARS ___ / ___

DEMOG A9 Are you still in school? NO..... 1
 YES..... (SKIP TO A11)..... 5

A. How old were you when you stopped being a full-time student? AGE ___ / ___

DEMOG A10 Did you (graduate from/complete) the last school you attended? NO..... 1
 YES..... 5

DEMOG A11 Do you usually speak (LANGUAGE OF INTERVIEW) at home? NO..... 1
 YES..... (SKIP TO B1)..... 5

A. When did you begin speaking (LANGUAGE OF INTERVIEW)? AGE ___ / ___

SECTION D

SPEC10A1 SPEC4A	D1	HAND CARD D1 TO RESPONDENT. On this list there are things that make some people so afraid that they avoid them, even when there is no real danger. Please look carefully at the list at the top of the card, which includes things like animals, heights, storms, being in closed spaces, and seeing blood. Have you ever had an unusually strong fear or needed to avoid any of the things on the list?	NO ..(SKIP TO D33).... 1 YES 5
--------------------	----	--	---

ANIM10A ANIM4A	A.	Now look at the first group. Have you ever had an unusually strong fear of any of these living things, such as insects, snakes, birds, or other animals?	NO 1 YES (CIRCLE GROUP 1, CD D1)..... 5
-------------------	----	--	---

ANIM10A ANIM4D	D2	Have you ever avoided being near insects, snakes, birds, or other animals, even though there was no real danger?	NO 1 YES (CIRCLE GROUP 1, CD D1)..... 5
-------------------	----	--	---

IF BOTH D1A AND D2 CODED 1 SKIP TO D9

ANIM4E	D3	Did the (fear/avoidance) of insects, snakes, birds, or other animals ever interfere with your life or activities a lot?	NO, NOT A LOT 1 YES, A LOT..... 5
--------	----	---	---

ANIM10C ANIM4C	D4	Was your (fear/avoidance) of insects, snakes, birds or other animals ever excessive, that is, much stronger than in other people?	NO 1 YES..... 5
-------------------	----	---	--------------------------

ANIM10C ANIM4C	A.	Was your (fear/avoidance) of insects, snakes, birds or other animals ever unreasonable, that is, much stronger than it should have been?	NO 1 YES..... 5
-------------------	----	--	--------------------------

ANIM10C ANIM4E	B.	Were you ever very upset with yourself for (having the fear of/avoiding) insects, snakes, birds or other animals?	NO 1 YES..... 5
-------------------	----	---	--------------------------

IF NO 5's IN D4, D4A, OR D4B SKIP TO D9

ANIM4D	D5	When you had to be near insects, snakes, birds, or other animals, or thought you would have to be, did you usually become very upset?	NO 1 YES 5
--------	----	---	---------------------------

ANIM10B
ANIM4B

D6

Now look at the bottom of the card. When you were near insects, snakes, birds, or other animals, or thought you would have to be, (START ASKING 1-14, BUT AFTER TWO ITEMS CODED 5 SKIP TO D7)

		NO	YES
1.	Did your heart pound or race?	1	5
2.	Did you sweat?	1	5
3.	Did you tremble or shake?	1	5
4.	Did you have a dry mouth?	1	5
5.	Were you short of breath?	1	5
6.	Did you feel like you were choking?	1	5
7.	Did you have pain or discomfort in your chest?	1	5
8.	Did you have nausea or discomfort in your stomach?	1	5
9.	Were you dizzy or feeling faint?	1	5
10.	Did you feel that you or things around you were unreal?	1	5
11.	Were you afraid that you might lose control of yourself, act in a crazy way, or pass out?	1	5
12.	Were you afraid that you might die?	1	5
13.	Did you have hot flushes or chills?	1	5
14.	Did you have numbness or tingling sensations?	1	5

ANIM10ON
ANIM4ON
ANIM10RE
ANIM4RE

D7

ONS/REC: When was the (first/last) time you (were afraid of/avoided) insects, snakes, birds or other animals?

ONS: 1 2 3 4 5 6
AGE ONS: ___/___
REC: 1 2 3 4 5 6
AGE REC: ___/___

ANIM10A
ANIM4A

D8

Between the first time and the last time, was this (strong fear/avoidance) of insects, snakes, birds or other animals usually present whenever you were near them or thought you would have to be near them?

NO..... 1
YES..... 5

NATU10A
NATU4A

D9

Now look at the second group on the card. Have you ever had an unusually strong fear of any of these things, such as heights, storms, thunder or lightning, or being in still water like a swimming pool or lake?

NO..... 1
YES (CIRCLE GROUP 2,
..... CD D1) 5

NATU10A
NATU4D

D10

Have you ever avoided heights, storms, thunder or lightning, or being in still water even though there was no real danger?

NO..... 1
YES (CIRCLE GROUP 2,
..... CD D1) 5

IF BOTH D9 AND D10 CODED 1 SKIP TO D17

NATU4E	D11	Did the (fear/avoidance) of heights, storms, thunder or lightning, or of being in still water ever interfere with your life or activities a lot?	NO, NOT A LOT..... 1 YES, A LOT 5
NATU10C NATU4C	D12	Was your (fear/avoidance) of heights, storms, or still water ever excessive, that is, much stronger than in other people?	NO..... 1 YES..... 5
NATU10C NATU4C	A.	Was your (fear/avoidance) of heights, storms, or still water ever unreasonable, that is, much stronger than it should have been?	NO..... 1 YES..... 5
NATU10C NATU4E	B.	Were you ever very upset with yourself for (having the fear of/avoiding) heights, storms, or still water?	NO..... 1 YES..... 5

IF NO 5's IN D12, D12A OR D12B SKIP TO D17

NATU4D	D13	When you had to be near heights or storms or still water, or thought you would have to be, did you usually become very upset?	NO..... 1 YES..... 5
NATU10B NATU4B	D14	Look at the bottom of the card. When you were near heights or in storms or still water, or thought you would have to be, (START ASKING 1-14, BUT AFTER TWO ITEMS CODED 5 SKIP TO D15)	
			NO YES
	1.	Did your heart pound or race?	1 5
	2.	Did you sweat?	1 5
	3.	Did you tremble or shake?	1 5
	4.	Did you have a dry mouth?	1 5
	5.	Were you short of breath?	1 5
	6.	Did you feel like you were choking?	1 5
	7.	Did you have pain or discomfort in your chest?	1 5
	8.	Did you have nausea or discomfort in your stomach?	1 5
	9.	Were you dizzy or feeling faint?	1 5
	10.	Did you feel that you or things around you were unreal?	1 5
	11.	Were you afraid that you might lose control of yourself, act in a crazy way, or pass out?	1 5
	12.	Were you afraid that you might die?	1 5
	13.	Did you have hot flushes or chills?	1 5
	14.	Did you have numbness or tingling sensations?	1 5

NATU10ON NATU4ON NATU10RE NATU4RE	D15	ONS/REC: When was the (first/last) time you (were afraid of/avoided) heights, storms, or still water?	ONS: 1 2 3 4 5 6 AGE ONS: / / REC: 1 2 3 4 5 6 AGE REC: / /
NATU10A NATU4A	D16	Between the first time and the last time, was this (strong fear/avoidance) of heights, storms or still water usually present whenever you were near them or thought you would have to be near them?	NO..... 1 YES..... 5
SITU10A SITU4A	D17	Look at the third group of situations on the card. Have you ever had an unusually strong fear of flying or of being in a closed space, like a cave, tunnel, or elevator?	NO..... 1 YES (CIRCLE GROUP 3, CD D1)..... 5
SITU10A SITU4D	D18	Have you ever avoided flying or being in a closed space even though there was no real danger?	NO..... 1 YES (CIRCLE GROUP 3, CD D1)..... 5
IF BOTH D17 AND D18 CODED 1 SKIP TO D25			
SITU4E	D19	Did the (fear/avoidance) of flying or being in a closed space ever interfere with your life or activities a lot?	NO, NOT A LOT..... 1 YES, A LOT..... 5
SITU10C SITU4C	D20	Was your (fear/avoidance) of flying or closed spaces ever excessive, that is, much stronger than in other people?	NO..... 1 YES..... 5
SITU10C SITU4C	A.	Was your (fear/avoidance) of flying or closed spaces ever unreasonable, that is, much stronger than it should have been?	NO..... 1 YES..... 5
SITU10C SITU4E	B.	Were you ever very upset with yourself for (having the fear of/avoiding) flying or closed spaces?	NO..... 1 YES..... 5
IF NO 5's IN D20, D20A OR D20B SKIP TO D25			
SITU4D	D21	When you had to fly or be in a closed space, or thought you would have to, did you usually become very upset?	NO..... 1 YES..... 5

SITU10B SITU4B	D22	Look at the bottom of the card. When you had to fly or be in a closed space, or thought you would have to, (START ASKING 1-14, BUT AFTER TWO ITEMS CODED 5 SKIP TO D23)	NO	YES
	1.	Did your heart pound or race?	1	5
	2.	Did you sweat?	1	5
	3.	Did you tremble or shake?	1	5
	4.	Did you have a dry mouth?	1	5
	5.	Were you short of breath?	1	5
	6.	Did you feel like you were choking?	1	5
	7.	Did you have pain or discomfort in your chest?	1	5
	8.	Did you have nausea or discomfort in your stomach?	1	5
	9.	Were you dizzy or feeling faint?	1	5
	10.	Did you feel that you or things around you were unreal?	1	5
	11.	Were you afraid that you might lose control of yourself, act in a crazy way, or pass out?	1	5
	12.	Were you afraid that you might die?	1	5
	13.	Did you have hot flushes or chills?	1	5
	14.	Did you have numbness or tingling sensations?	1	5

SITU10ON SITU4ON SITU10RE SITU4RE	D23	ONS/REC: When was the (first/last) time you (were afraid of/avoided) flying or closed spaces?	ONS: 1 2 3 4 5 6 AGE ONS: / /
			REC: 1 2 3 4 5 6 AGE REC: / /

SITU10A SITU4A	D24	Between the first time and the last time, was this (strong fear/avoidance) of flying or closed spaces usually present whenever you encountered them or thought you would have to encounter them?	NO 1 YES..... 5
-------------------	-----	--	--------------------------

BI10A BI4A	D25	Look at the last group of situations on Card D1. Have you ever had an unusually strong fear of any of these situations, like seeing blood, getting an injection, or going to the dentist or hospital?	NO 1 YES (CIRCLE GROUP 4, CD D1)..... 5
---------------	-----	---	--

BI10A BI4D	D26	Have you ever avoided seeing blood, getting an injection, or going to the dentist or hospital even though there was no real danger?	NO 1 YES (CIRCLE GROUP 4, CD D1)..... 5
---------------	-----	---	--

IF BOTH D25 AND D26 CODED 1 SKIP TO D33

BI4E	D27	Did the (fear/avoidance) of seeing blood, getting an injection, or going to the dentist or hospital ever interfere with your life or activities a lot?	NO, NOT A LOT 1 YES, A LOT 5
------	-----	--	---

BI10C BI4C	D28	Was your (fear/avoidance) of seeing blood, getting an injection, or going to the dentist or hospital ever excessive, that is, much stronger than in other people?	NO 1 YES 5
---------------	-----	---	---------------------------

BI10C BI4C	A.	Was your (fear/avoidance) of seeing blood, getting an injection, or going to the dentist or hospital ever unreasonable, that is, much stronger than it should have been?	NO 1 YES 5
---------------	----	--	---------------------------

BI10C BI4E	B.	Were you ever very upset with yourself for (having the fear of/avoiding) seeing blood, getting an injection, or going to the dentist or hospital?	NO 1 YES 5
---------------	----	---	---------------------------

IF NO 5's IN D28, D28A OR D28B SKIP TO D33

BI4D	D29	When you saw blood, or had to get an injection, or go to the dentist or hospital, or thought you would have to, did you usually become very upset?	NO 1 YES 5
------	-----	--	---------------------------

BI10B BI4B	D30	Now look at the bottom of the card. When you saw blood or had to get an injection or go to the dentist or hospital, or thought you would have to, (START ASKING 1-14, BUT AFTER TWO ITEMS CODED 5 SKIP TO D31)	
---------------	-----	--	--

			NO	YES
1.		Did your heart pound or race?	1	5
2.		Did you sweat?	1	5
3.		Did you tremble or shake?	1	5
4.		Did you have a dry mouth?	1	5
5.		Were you short of breath?	1	5
6.		Did you feel like you were choking?	1	5
7.		Did you have pain or discomfort in your chest?	1	5
8.		Did you have nausea or discomfort in your stomach?	1	5
9.		Were you dizzy or feeling faint?	1	5
10.		Did you feel that you or things around you were unreal?	1	5
11.		Were you afraid that you might lose control of yourself, act in a crazy way, or pass out?	1	5
12.		Were you afraid that you might die?	1	5
13.		Did you have hot flushes or chills?	1	5
14.		Did you have numbness or tingling sensations?	1	5

BI10ON BI4ON BI10RE BI4RE	D31	ONS/REC: When was the (first/last) time you (were afraid of/avoided) seeing blood, getting an injection, or going to the dentist or hospital?	ONS: 1 2 3 4 5 6 AGE ONS: ___/___ REC: 1 2 3 4 5 6 AGE REC: ___/___
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BI10A BI4A	D32	Between the first time and the last time, was this (strong fear/avoidance) of seeing blood, getting an injection, or going to the dentist or hospital usually present whenever you encountered them or thought you would have to encounter them?	NO 1 YES..... 5
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SOC10A1 SOC4A	D33	<p>Now I would like to ask you about other situations in which you may have been anxious or afraid. Some people have a strong fear of doing things in front of others or of being the centre of attention.</p> <p>HAND CARD D2 TO RESPONDENT. Look at the situations on Card D2. Have you ever had an unusually strong fear or avoidance of any of the situations on the list?:</p> <p>A. Have you ever had an unusually strong fear of:</p> <ol style="list-style-type: none"> 1. eating or drinking where someone could watch you? 2. talking to people because you might have nothing to say or might sound foolish? 3. writing while someone watches? 4. taking part or speaking in a meeting or class? 5. going to a party or other social outing? 6. giving a speech or speaking in public? 7. Have you ever had an unusually strong fear of any other situation where you could be the centre of attention? IF CODED 1, SKIP TO D34, ELSE ASK: Could you give me an example of a situation you fear where you could be the centre of attention? <p>EXAMPLE: _____</p> <p>CIRCLE EACH ITEM CODED 5 ON CARD D2</p>	<p>NO . (SKIP TO D43).... 1 YES..... 5</p> <table border="1"> <thead> <tr> <th></th> <th>NO</th> <th>YES</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>1</td> <td>5</td> </tr> <tr> <td>2.</td> <td>1</td> <td>5</td> </tr> <tr> <td>3.</td> <td>1</td> <td>5</td> </tr> <tr> <td>4.</td> <td>1</td> <td>5</td> </tr> <tr> <td>5.</td> <td>1</td> <td>5</td> </tr> <tr> <td>6.</td> <td>1</td> <td>5</td> </tr> <tr> <td>7.</td> <td>1</td> <td>5</td> </tr> </tbody> </table>		NO	YES	1.	1	5	2.	1	5	3.	1	5	4.	1	5	5.	1	5	6.	1	5	7.	1	5
	NO	YES																									
1.	1	5																									
2.	1	5																									
3.	1	5																									
4.	1	5																									
5.	1	5																									
6.	1	5																									
7.	1	5																									

SOC10A2 SOC4D	D34	Have you often avoided situations, like those on Card D2, where you could be the centre of attention? IF CODED 5, ASK: Which ones? (Any others?) CONTINUE ASKING UNTIL R. SAYS NO. CIRCLE ITEMS MENTIONED BY R THAT HAVE NOT ALREADY BEEN CIRCLED ON CARD D2	NO 1 YES..... 5
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IF D33A.1-7 AND D34 ALL CODED 1 SKIP TO D43

SOC4G SOC4H	D35	Did you tell a doctor about your (<u>fear/avoidance</u>) of situations, like those circled on Card D2, <u>where you could be the centre of attention</u> ? CONTINUE PROBING, BUT NOTE THAT FEARS RELATED TO SPEECH DEFECTS, TREMBLING IN PHYSICAL ILLNESS, AND EATING PROBLEMS ARE TREATED AS PHYSICAL ILLNESSES. MD: _____ OTHER: _____	PRB: 2 3 4 5
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SOC10A SOC4A	D36	(Were you afraid of/Did you avoid) situations where you could be the centre of attention, like those circled on Card D2, because you might show anxiety or act in a way that could be humiliating?	NO 1 YES..... 5
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SOC10C SOC4C	D37	Was your (<u>fear/avoidance</u>) of any of these situations where you could be the centre of attention, like those circled on Card D2, ever excessive, that is, much stronger than in other people?	NO 1 YES..... 5
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SOC10C SOC4C	A.	Was your (<u>fear/avoidance</u>) of any of these situations where you could be the centre of attention, like those circled on Card D2, ever unreasonable, that is, much stronger than it should have been?	NO 1 YES..... 5
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SOC10C SOC4E	B.	Were you ever very upset with yourself for (having the fear of/avoiding) situations where you could be the centre of attention, like those circled on Card D2?	NO 1 YES..... 5
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SOC4F	C.	IF R IS UNDER 18 YEARS OLD; ASK C. OTHERS, SKIP TO D38. What is the longest period you have had of (being afraid/avoiding) any of these situations where you might be the centre of attention?	_____ MOS
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SOC4E	D38	Did the (<u>fear/avoidance</u>) of any of these situations where you could be the centre of attention, like those circled on Card D2, ever interfere with your life or activities a lot?	NO, NOT A LOT 1 YES, A LOT 5
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SOC4D	D39	When you were in these situations where you could be the centre of attention, like those circled on Card D2, or thought you would have to be, did you usually become very upset?	NO 1 YES..... 5
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SOC10B SOC4B	D40	When you were in a situation where you could be the centre of attention, like those circled on Card D2, or thought you would have to be,	NO	YES
	1.	Did you blush or shake?	1	5
	2.	Did you have nausea or discomfort in your stomach or think you might vomit?	1	5
	3.	Were you afraid that you might lose control of your bowels or bladder?	1	5
	A.	Look at the bottom of the card. When you were in a situation where you could be the centre of attention, like those circled, or thought you would have to be (START ASKING 1-13 BUT AFTER TWO ITEMS CODED 5 SKIP TO D41),	NO	YES
	1.	Did your heart pound or race?	1	5
	2.	Did you sweat?	1	5
	3.	Did you tremble or shake?	1	5
	4.	Did you have a dry mouth?	1	5
	5.	Were you short of breath?	1	5
	6.	Did you feel like you were choking?	1	5
	7.	Did you have pain or discomfort in your chest?	1	5
	8.	Were you dizzy or feeling faint?	1	5
	9.	Did you feel that you or things around you were unreal?	1	5
	10.	Were you afraid that you might lose control of yourself, act in a crazy way, or pass out?	1	5
	11.	Were you afraid that you might die?	1	5
	12.	Did you have hot flushes or chills?	1	5
	13.	Did you have numbness or tingling sensations?	1	5

SOC10ON SOC4ON SOC10RE SOC4RE SOC4F	D41	ONS/REC: When was the (first/last) time you (were afraid of/avoided) situations where you could be the centre of attention, like those circled on Card D2?	ONS: 1 2 3 4 5 6 AGE ONS: <u> </u> / <u> </u> REC: 1 2 3 4 5 6 AGE REC: <u> </u> / <u> </u>
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SOC4A	D42	Between the first time and the last time, was this (fear/avoidance) of situations where you could be the centre of attention, like those circled on Card D2, usually present whenever you encountered the situation or thought you would have to encounter the situation?	NO 1 YES..... 5
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AG10A D43 HAND CARD D3 TO RESPONDENT. Now I would like to ask NO . (SKIP TO D54).... 1
 AG4A you about more situations in which you may have been afraid. YES..... 5
 Look at the situations on Card D3. Have you ever had a strong
 fear or avoidance of any of the situations on the list?

- | | | | |
|----|---------------------------------------|----|-----|
| A. | Have you ever had a strong fear of: | NO | YES |
| 1. | being outside your home alone? | 1 | 5 |
| 2. | travelling in a bus, train, or car? | 1 | 5 |
| 3. | being in a crowd or standing in line? | 1 | 5 |
| 4. | being in a public place, like a shop? | 1 | 5 |

CIRCLE EACH ITEM CODED 5 ON CARD D3

AG10A D44 Have you often avoided situations like those on Card D3 NO 1
 AG4B because of your fear? IF CODED 5, ASK: Which ones? (Any YES..... 5
 others?) CONTINUE ASKING UNTIL R. SAYS NO. CIRCLE
 ITEMS MENTIONED BY R THAT HAVE NOT ALREADY
 BEEN CIRCLED ON CARD D3

IF D43A1-4 AND D44 ALL CODED 1, SKIP TO D54.

AG4B D45 Was there ever a time in your life when you were so afraid of NO . (SKIP TO D46).... 1
 these situations that you couldn't remain in them alone? YES..... 5

A.	Were you able to remain in the situations like those NO 1 circled on Card D3 if you had someone you knew with YES..... 5 you?
----	---

D46 Did you tell a doctor about your (fear/avoidance) of situations PRB: 2 3 4 5
like those circled on Card D3? CONTINUE PROBING.
 MD: _____ OTHER: _____

AG4B D47 When you were in a situation like those circled on Card D3, or NO 1
 thought you would have to be, did you usually become very YES..... 5
 upset?

AG10B	D48	Look at the bottom of the card. When you were in a situation like those circled, or thought you would have to be, (START ASKING 1-14, BUT AFTER TWO ITEMS CODED 5 SKIP TO D49):		
			NO	YES
		1. Did your heart pound or race?	1	5
		2. Did you sweat?	1	5
		3. Did you tremble or shake?	1	5
		4. Did you have a dry mouth?	1	5
		5. Were you short of breath?	1	5
		6. Did you feel like you were choking?	1	5
		7. Did you have pain or discomfort in your chest?	1	5
		8. Did you have nausea or discomfort in your stomach?	1	5
		9. Were you dizzy or feeling faint?	1	5
		10. Did you feel that you or things around you were unreal?	1	5
		11. Were you afraid that you might lose control of yourself, act in a crazy way, or pass out?	1	5
		12. Were you afraid that you might die?	1	5
		13. Did you have hot flushes or chills?	1	5
		14. Did you have numbness or tingling sensations?	1	5

IF NO 5 CODED IN 1-14, SKIP TO D51

AG4A	D49	(Were you afraid of/Did you avoid) situations like those circled on Card D3 because you would be unable to escape if you suddenly had some of these problems?	NO 1	YES..... 5
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AG4A	D50	(Were you afraid of/Did you avoid) situations like those circled on Card D3 because you might be unable to get help if you suddenly had some of these problems?	NO 1	YES..... 5
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AG10C	D51	Was your (fear/avoidance) of any of the situations like those circled on Card D3 ever excessive, that is, much stronger than in other people?	NO 1	YES..... 5
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AG10C	A.	Was your (fear/avoidance) of any of the situations like those circled on Card D3 ever unreasonable, that is, much stronger than it should have been?	NO 1	YES..... 5
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AG10C	B.	Were you ever very upset with yourself (for having the fear of/avoiding) situations like those circled on Card D3?	NO 1	YES..... 5
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AG100N AG40N AG10RE AG4RE	D52	ONS/REC: When was the (first/last) time you (were afraid of/avoided) situations like those circled on Card D3?	ONS: 1 2 3 4 5 6 AGE ONS: / / REC: 1 2 3 4 5 6 AGE REC: / /
AG10A	D53	Between the first time and the last time, was this strong (fear/avoidance) of situations like those circled on Card D3 usually present whenever you encountered the situation or thought you would have to encounter the situation?	NO 1 YES..... 5
PAN10B1 PAN4A1 PAN10A	D54	Now I would like to ask you about attacks of fear that could happen anywhere. Have you ever had an attack when all of a sudden you felt frightened, anxious or very uneasy?	NO . (SKIP TO D63).... 1 YES..... 5
PAN10A	D55	Did any of those attacks occur when you were in a life-threatening situation?	NO . (SKIP TO D56).... 1 YES..... 5
	A.	Did any of these attacks occur when you were not in a life-threatening situation?	NO . (SKIP TO D63).... 1 YES..... 5
PAN10A PAN4A1	D56	In answering the following questions, think only of attacks that occurred when you were not in a life-threatening situation. Have you more than once had an attack like that which was totally unexpected?	NO . (SKIP TO D63).... 1 MORE THAN..... 1 ONCE..... 5

PAN10B4
PAN4A1

D57

HAND CARD D4 TO RESPONDENT. Look at Card D4.
Think of a bad attack you have had. During that attack which
of these problems did you have? (START ASKING 1-14, BUT
AFTER 5 ITEMS CODED 5 SKIP TO D58)

		NO	YES
1.	Did your heart pound or race?	1	5
2.	Did you sweat?	1	5
3.	Did you tremble or shake?	1	5
4.	Did you have a dry mouth?	1	5
5.	Were you short of breath?	1	5
6.	Did you feel like you were choking?	1	5
7.	Did you have pain or discomfort in your chest?	1	5
8.	Did you have nausea or discomfort in your stomach?	1	5
9.	Were you dizzy or feeling faint?	1	5
10.	Did you feel that you or things around you were unreal?	1	5
11.	Were you afraid that you might lose control of yourself, act in a crazy way, or pass out?	1	5
12.	Were you afraid that you might die?	1	5
13.	Did you have hot flushes or chills?	1	5
14.	Did you have numbness or tingling sensations?	1	5

CIRCLE EACH ITEM CODED 5 ON CARD D4

IF LESS THAN FIVE SX ARE CODED 5 IN 1-14, SKIP TO D63

PAN10B2
PAN10B3
PAN4A1

D58

During your attacks of feeling frightened or anxious, did these
problems begin suddenly and then get worse within the first few
minutes of the attack?

NO . (SKIP TO D63).... 1
YES..... 5

PAN4C

A. Did you tell a doctor about an attack like that?
CONTINUE PROBING.

PRB: 2 3 4 5

MD: _____ OTHER: _____

D59

After having one of these attacks, was there ever a month or
more when:

PAN4A2A

A. you often worried that you might have another attack?

NO 1
YES..... 5

PAN4A2B

B. you were worried that the attacks might lead to
something terrible happening, like dying, losing
control, or going crazy?

NO 1
YES..... 5

PAN4A2C

C. you changed your everyday activities because of fear
of the attacks?

NO 1
YES..... 5

PAN10SEV	D60	Have you ever had four of these attacks within a four-week period?	NO . (SKIP TO D61)..... 1 YES..... 5
	A.	Did you ever have a period of a month when you had at least four attacks every week?	NO 1 YES..... 5

PAN10ON PAN4ON PAN10RE PAN4RE	D61	ONS/REC: When was the (first/last) time you had one of these sudden attacks of feeling frightened or anxious?	ONS: 1 2 3 4 5 6 AGE ONS: / / REC: 1 2 3 4 5 6 AGE REC: / /
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IF NO SITUATIONS CIRCLED ON CARDS D1, D2 AND D3, SKIP TO D63.

PAN10A ANIM10D SITU10D NATU10D BI10D SOC10D AG10D	D62	Look at Cards D1, D2 and D3. You have also said that you have been afraid of or avoided some of the situations listed on the cards. Did the sudden attacks of being frightened or anxious occur only when you were in those situations?	YES ONLY IN FEARED SITUATIONS 1 NO AT OTHER TIMES 5
---	-----	---	---

GAD10A GAD4A	D63	Now I want to ask you about longer periods of feeling worried, tense or anxious. Have you ever had a period of a month or more when most of the time you felt worried, tense or anxious, about everyday problems such as work or family?	NO . (SKIP TO B) 1 YES..... 5
	A.	What is the longest period you have had of feeling worried, tense or anxious?	_____ / _____ MOS
		IF D63A IS SIX MONTHS OR MORE, SKIP TO D64.	
	B.	People differ a lot in how much they worry about things. Did you ever have a time in your life when you worried a lot more than most people would in your situation?	NO . (SKIP TO E1)..... 1 YES..... 5
	C.	What is the longest period of this sort you have had?	_____ / _____ MOS
		IF D63C IS LESS THAN SIX MONTHS SKIP TO E1.	

D64	Think of your worst period of six months or more of feeling worried, tense, or anxious. During that period:		
GAD4A	A. do you think your worrying was excessive, that is, much stronger than in other people?	NO	1
		YES.....	5
GAD10A GAD4A	B. did you worry about these things most days?	NO	1
		YES.....	5
GAD4B	C. did you find it difficult to stop worrying?	NO	1
		YES.....	5
GAD10A GAD4D	D. what sort of things did you mainly worry about? EXAMPLE: _____ IF EXAMPLE IS EXCLUSIVELY ABOUT OWN SYMPTOMS, WEIGHT OR DRUGS, ASK: Anything else? IF EXAMPLE STILL DOES NOT INCLUDE OTHER WORRIES, CODE 1 AND SKIP TO E1.	OWN SX, BEING OVERWEIGHT, DRUGS.....	1
		ANYTHING ELSE.....	5

GAD10B GAD4C	D65	HAND CARD D5 TO RESPONDENT. Now look at Card D5. I would like you to look at the list of problems some people have during such periods of feeling worried, tense, or anxious. Think about your worst period of feeling worried, tense, or anxious. During that period:		
			NO	YES
		1. were you restless?	1	5
		2. did you feel keyed up or on edge?	1	5
		3. were you easily tired?	1	5
		4. did you have difficulty keeping your mind on what you were doing?	1	5
		5. were you more irritable than usual?	1	5
		6. did you have tense, sore or aching muscles?	1	5
		7. did you have trouble falling or staying asleep?	1	5
		8. did your heart pound or race?	1	5
		9. did you sweat?	1	5
		10. did you tremble or shake?	1	5
		11. did you have a dry mouth?	1	5
		IF NO 5'S ARE CODED IN 1-11, SKIP TO E1. IF 4 OR MORE 5'S ARE CODED IN 1-11, CIRCLE ITEMS CODED 5 ON CARD D5 AND SKIP TO D66. OTHERS ASK 12-24, BUT SKIP TO D66 AFTER A TOTAL OF 4 ITEMS ARE CODED 5 IN 1-24.		

- 12. were you short of breath? 1 5
- 13. did you feel like you were choking? 1 5
- 14. did you have pain or discomfort in your chest? 1 5
- 15. did you have pain or discomfort in your stomach? 1 5
- 16. did you have nausea? 1 5
- 17. did you feel dizzy or light headed? 1 5
- 18. did you feel that you or things around you were unreal? 1 5
- 19. were you afraid that you might lose control, act in a crazy way, or pass out? 1 5
- 20. were you afraid that you might die? 1 5
- 21. did you have hot flushes or chills? 1 5
- 22. did you have numbness or tingling sensations? 1 5
- 23. did you feel like you had a lump in your throat? 1 5
- 24. were you easily startled? 1 5

CIRCLE ITEMS CODED 5 ON CARD D5

IF LESS THAN 4 ITEMS CIRCLED ON CARD D5 SKIP TO E1

GAD10D GAD4F	D66	Did you tell a doctor about <u>the long periods of feeling worried, tense, or anxious</u> when you also had some of the problems on the list? CONTINUE PROBING MD: _____ OTHER: _____	PRB: 2 3 4 5
GAD4E	D67	Have you ever been very upset with yourself for feeling worried, tense, or anxious for long periods of time?	NO 1 YES..... 5
GAD4E	D68	Did the period of worry, tension or anxiety ever interfere with your life or activities a lot?	NO, NOT A LOT 1 YES, A LOT 5
GAD100N GAD4ON	D69	ONS: When did your first period of six months or more of feeling worried, tense, or anxious and having these other problems on the list begin?	ONS: 1 2 3 4 5 6 AGE ONS: ___/___
GAD10RE GAD4RE	REC:	When did your last period of being worried, tense, or anxious and having these problems on the list end?	REC: 1 2 3 4 5 6 AGE REC: ___/___

SECTION E

		I EVER IN LIFETIME				
CODE E1 - E24 IN COLUMN I						
DEP10B1 DP4A1	E1	Now I want to ask you about <u>periods of feeling sad, empty, or depressed</u> . In your lifetime, have you ever had two weeks or longer when nearly every day you felt sad, empty, or depressed for most of the day?	PRB: 1	3	4	5
		MD: _____ OTHER: _____				
DEP10B2 DP4A2 DEP10S1	E2	In your lifetime, have you ever had 2 weeks or longer when you <u>lost interest in most things</u> like work, hobbies, and other things you usually enjoyed?	PRB: 1	3	4	5
		MD: _____ OTHER: _____				
IF E1 AND E2 BOTH CODED 1 SKIP TO E34.						
LACKING ENERGY			I EVER IN LIFETIME		II WHEN MOST SX	
			NO	YES	NO	YES
DEP10B3 DP4A6	E3	During a period lasting two weeks or longer when you (felt sad, empty or depressed/lost interest in things), [did you <u>lack energy or feel tired</u> all the time nearly every day, even when you had not been working very hard?	1	5	1	5

SLEEP PROBLEMS			I EVER IN LIFETIME		II WHEN MOST SX	
			NO	YES	NO	YES
DEP10C6 DP4A4	E8	When you (were feeling depressed/had lost interest/lacked energy), [did you have <u>trouble sleeping</u> almost every night for two weeks or more - either trouble falling asleep, waking in the middle of the night, or waking up too early? IF NOT CODED 5, SKIP TO E9.	1	5	1	5
DEP10S3	A.	[Did you <u>wake up at least two hours before you wanted to</u> every day for at least 2 weeks?	1	5	1	5
DEP10C6 DP4A4.	E9	During a period when you (felt depressed/had lost interest/lacked energy) [were you <u>sleeping too much</u> almost every day?	1	5	1	5
SLOW/RESTLESS						
DEP10C5 DP4E	E10	During one of those periods [did you <u>talk or move more slowly</u> than is normal for you almost every day for at least two weeks? IF CODED 1, SKIP TO E11.	1	5	1	5
DEP10S5 DP4A5	A.	[Did anyone else notice that you were talking or moving slowly?	1	5	1	5
DEP10C5 DP4A5 ML4B4	E11	During one of those periods, [did you have to <u>be moving all the time</u> --that is, you couldn't sit still and paced up and down or couldn't keep your hands still when sitting? IF CODED 1, SKIP TO E12	1	5	1	5
DEP10S5 DP4A5	A.	[Did anyone else notice that you were moving all the time?	1	5	1	5

APPETITE CHANGE			I EVER IN LIFETIME		II WHEN MOST SX	
			NO	YES	NO	Y
DEP10C7 DP4A3 DEP10S6	E4	What about other problems you had during a period when you (felt depressed/lost interest in things/felt tired all the time) for two weeks or longer. [Did you have <u>less appetite than usual</u> almost every day?	1	5	1	5
DEP10C7 DP4A3	E5	During one of those periods [did you <u>lose weight</u> without trying to, as much as (two pounds/a kilo) a week for several weeks? IF E5 CODED 1, SKIP TO E6	1	5	1	5
DEP10S7	A.	How much weight did you lose?	LB <u> </u> / <u> </u> KG <u> </u> / <u> </u>		LB <u> </u> / <u> </u> KG <u> </u> / <u> </u>	
DEP10C7 DP4A3	E6	During one of those periods, [did you have a <u>much larger appetite than is usual</u> for you almost every day for two weeks or more? CODE 1 IF ONLY BECAUSE GROWING FAST OR PREGNANT	1	5	1	5
DEP10C7 DP4A3	E7	During one of those periods, [did your eating increase so much that you <u>gained weight</u> - as much as (two pounds/a kilo) a week for several weeks? CODE 1 IF ONLY REGAINED WEIGHT LOST. IF E7 CODED 1, SKIP TO E8.	1	5	1	5
DP4A3	A.	How much weight did you gain?	LB <u> </u> / <u> </u> KG <u> </u> / <u> </u>		LB <u> </u> / <u> </u> KG <u> </u> / <u> </u>	

WORTHLESS OR GUILTY			I EVER IN LIFETIME		II WHEN MOST SX	
			NO	YES	NO	Y
DEP10C2 DP4A7 DP4E	E12	During one of those periods [did you <u>feel worthless</u> nearly every day?	1	5	1	5
	A.	[Did you <u>feel guilty</u> ?	1	5	1	5
IF E12 AND E12A CODED 1, SKIP TO E13.						
	B.	[Was there a particular reason for feeling (worthless/guilty)? COL. I ONLY: RECORD EXAMPLE: _____ _____ _____	1	5	1	5
IF E12B CODED 1, SKIP TO E13.						
		COL. II ONLY: RECORD EXAMPLE: _____ _____ _____				
DP4A7	C.	WAS R WORTHLESS/GUILTY <u>ONLY</u> ABOUT BEING IMPAIRED BY DEPRESSION?	YES..... 1 NO..... 5		YES 1 NO 5	

LACK OF CONFIDENCE

DEP10C1	E13	During one of those periods [did you feel that you were <u>not as good as other people</u> ?	1	5	1	5
DEP10C1	E14	[Did you have so <u>little self-confidence</u> that you wouldn't try to have your say about anything?	1	5	1	5

			I EVER IN LIFETIME		II WHEN MOST SX		
			NO	YES	NO	YES	
DEP10S8	E23	During one of those periods [was your <u>interest in sex a lot less than usual</u> ?	1	5	1	5	
DEP10S2	E24	[Did you <u>lose the ability to enjoy having good things happen to you</u> , like winning something or being praised or complimented?	1	5	1	5 GO TO E34	
DEP10A DP4E DP4D	E25	During any period of (<u>feeling sad, empty, or depressed/having lost interest</u>), did you tell a doctor about your feelings or about the problems you were having at the time with (LIST SXs CODED 5 IN E3-E20)? CONTINUE PROBING. MD: _____ OTHER: _____ IF NOT CODED PRB 5, SKIP TO E34.	PRB:	2	3	4 5	
DP4A DEP10A DP4E	E26	What is the longest period like that you've ever had? IF WHOLE LIFE OR MORE THAN 19 YEARS, ENTER 996. (YEARS X 52 = # WEEKS, MONTHS X 4 = # WEEKS.) IF 0 TO 13 DAYS CODE 001 AND SKIP TO E34. A. Did any period lasting two weeks or longer seriously interfere with your ability to do your job, take care of your house or family, or take care of yourself?				_ / _ / _ WEEKS	
			NO.....	1			
			YES.....	5			
DP4ON DEP10ON DP4RE DEP10RE	E27	ONS/REC: When was the (first/last) time you had a period of two weeks or more when you (felt sad, empty, or depressed/lost interest/lacked energy) and also had some of these problems like (SX CODED 5 IN E4-E20)?	ONS:	1 2 3 4 5 6			
			AGE ONS:	_ / _			
			REC:	1 2 3 4 5 6			
			AGE REC:	_ / _			
GA4F	E28	IF E26 IS LESS THAN 26, SKIP TO E29. IF D69 AGE ONS IS BLANK OR LESS THAN E27 AGE ONS, SKIP TO E29. OTHERS ASK: You said earlier that you had a long period when you were anxious and worried about several different things. Did your long periods of feeling anxious and worried fall entirely within one of these periods when you (were depressed/had lost interest)?	NO.....	1			
			YES.....	5			

TROUBLE THINKING			I EVER IN LIFETIME		II WHEN MOST SX	
			NO	YES	NO	YES
DEP10C4 DP4A8	E15	During one of those periods [did you have a lot more <u>trouble concentrating</u> than is normal for you?	1	5	1	5
	A.	[Were you <u>unable to read</u> things that usually interest you or <u>watch television</u> or movies you usually liked, because you couldn't pay attention to them?	1	5	1	5
DEP10C4 DP4A8	E16	[Did your thoughts come much slower than usual or seem mixed up?	1	5	1	5
DEP10C4 DP4A8	E17	[Were you <u>unable to make up your mind</u> about things you ordinarily had no trouble deciding about?	1	5	1	5
THOUGHTS OF DEATH						
DEP10C3 DP4A9	E18	During one of those periods [did you <u>think a lot about death</u> ?	1	5	1	5
DEP10C3 DP4A9	E19	[Did you <u>feel so low you thought a lot about committing suicide</u> ?	1	5	1	5
		IF CODED 1, SKIP TO E21.				
DP4A9 DEP10C3	A.	[Did you make a plan as to how you might do it?	1	5	1	5
DEP10C3 DP4A9	E20	[Did you <u>attempt suicide</u> ?	1	5	1	5
	E21	ADD TOGETHER THE NUMBER OF 5'S IN E1, E2, PLUS THE NUMBER OF BOXES WITH AT LEAST ONE 5. IS THE TOTAL 4 OR MORE?	NO.....	1	YES.....	5
		IF NO, SKIP TO E34.				
DEP10S4	E22	During a two week period of (feeling depressed/having lost interest/lacking energy) [most days, did you feel <u>particularly bad when you first got up</u> , but felt better later in the day?	1	5	1	5

DEP10RG1
MDR4A

E29

In your lifetime, how many different periods have you had that lasted two weeks or more when you (felt depressed/lost interest in things/lacked energy) and had some of the problems we've talked about? IF 96 EPISODES OR MORE, ENTER 96.

 1
#EPISODES

IF CODED 01, SKIP TO E30.

A. In between (any of) these periods of (feeling depressed/having no interest in things/lacking energy) were you feeling OK for some months? NO.....(SKIP TO E30)..... 1
OKAY IN BETWEEN..... 5

B. Between your periods of depression, were you as able to work and enjoy being with other people as you were before they began? NO.....(SKIP TO E30)..... 1
YES..... 5

C. Did that time when you felt OK and enjoyed being with other people last at least 2 months? NO.....(SKIP TO E30)..... 1
YES..... 5

D. How many separate periods of (being depressed/having no interest in things/lacking energy) did you have, if you count only periods where you felt OK for at least 2 months in between them? 1
#EPISODES
WITH 2 MONTH
INTERVALS

IF E29D CODED 1, SKIP TO E30

E. When your first period like that ended - that is, you had two months of feeling OK afterwards - how old were you? 1
AGE AT END
OF FIRST
EPISODE

01/06/97

DP4E E30 Did (this period/any of these periods) of (depression/loss of interest) occur just after someone close to you died? NO.....(SKIP TO C).....1
YES.....5

IF VOLUNTEERS BEGAN MORE THAN 2 MONTHS AFTER DEATH, CODE 1 AND SKIP TO C.

A. Have you had any period of (feeling depressed/having lost interest) along with these other problems (LIST 3 SX CODED 5 FROM E3-E20) at times when it wasn't just after the death of someone close to you? NO, ONLY AFTER DEATH.....
.....(SKIP TO E31).....1
YES, OTHER TIMES.....5

B. IF HAD DEPRESSED PERIOD IN LAST YEAR (E27 REC = 1-5), ASK: What about the period(s) you had in the last year? (Was that/were they all) shortly after the death of someone close to you? YES, ONLY AFTER DEATH.....2
NO, NOT ONLY AFTER DEATH.....5

C. IF MALE OR NO CHILDREN (A5=00), SKIP TO E31. Did (this/any of these) period(s) start within a month of having a baby? NO.....1
YES.....5

E31 DID R HAVE 2 OR MORE SEPARATE DEPRESSED PERIODS (E29D CODED 2 OR MORE)? NO.....(SKIP TO E34).....1
YES.....5

E32 Now I'd like to know about the time when you (were feeling depressed/lost interest/lacked energy) for at least two weeks and had the largest number of other problems we've talked about at the same time. How old were you at that time? (IF CAN'T CHOOSE: Then pick one bad two week period.) / AGE

E33 I'll be asking which of these problems you had during the two weeks when you were ___/___ years old and had the largest number of these problems at the same time.

At that time, were you feeling sad or depressed? NO.....1
YES.....5

A. Had you lost interest in almost everything? NO.....1
YES.....5

(RETURN TO E3, COL. II. READ EACH QUESTION CODED 5 IN COL. I, BEGINNING AT [. CODE IN COL. II.

DY4A E34 Have you ever had two years or more in your life when you felt depressed or sad most days, even if you felt OK sometimes? NO.....(SKIP TO F1).....1
YES.....5

DYS10A
DY4C A. Did any period like that ever last 2 years without an interruption of 2 full months when you felt OK? PRB: 1 2 3 4 5

IF NO, CODE PRB 1, AND SKIP TO F1.

During a period of 2 years or more of feeling depressed or sad, did you tell a doctor about those feelings? CONTINUE PROBING.

MD: _____ OTHER: _____

			NO	YES
DYS10C2 DY4B2	E35	During such a long period of feeling depressed did you have <u>trouble sleeping</u> - either trouble falling asleep, waking in the middle of the night, or waking up too early?	1	5
DY4B2	E36	During a period of being depressed for two years or longer, did you often <u>sleep too much</u> ?	1	5
DY4B1	E37	During a two year or longer period of being depressed, did you often have <u>very little appetite for food</u> ?	1	5
DY4B1	E38	During two years of being depressed, did you frequently <u>eat much more than is usual for you</u> ?	1	5
DYS10C1 DY4B3	E39	Did you <u>lack energy or feel tired</u> much of the time even when you had not been working very hard?	1	5
DYS10C3 DY4B4	E40	During a two year period of depression, did you often feel that you were <u>not as good as other people</u> ?	1	5

			NO	YES
DYS10C3 DY4B4	E41	Did you have so <u>little self-confidence</u> that you wouldn't try to have your say about anything?	1	5
DYS10C4 DY4B5	E42	During a two year period of being depressed, did you have a lot more <u>trouble concentrating</u> than is normal for you?	1	5
DY4B5	E43	During a two year period of being depressed, were you <u>unable to make up your mind</u> about things you would ordinarily have had no trouble deciding about?	1	5
DYS10C5	E44	During a two year period of being depressed, <u>were you often in tears</u> ?	1	5
DYS10C7 DY4B6	E45	During a two year period of being depressed, did you frequently <u>feel hopeless</u> -- that there was no way to improve things?	1	5
DYS10C8	E46	During any two year period of being depressed, did you often <u>feel that you could not cope with your everyday life</u> and responsibilities?	1	5
DYS10C9	E47	During a two year period of being depressed, did you <u>feel that your life had always been bad and wasn't going to get any better</u> ?	1	5
DYS10C10	E48	During a long period of being depressed, did you <u>find you no longer wanted to spend time with friends or relatives</u> ?	1	5
DYS10C11	E49	During a long period of being depressed, were you <u>less talkative than is usual</u> for you?	1	5

			NO	YES
DYS10C6	E50	During a two year period of being depressed, did you <u>lose interest in most things</u> like work and hobbies or things you usually liked to do for fun?	1	5
DYS10C6	E51	During a two year period of being depressed, was your <u>interest in sex a lot less than usual</u> ?	1	5

IF NO 5s CODED IN E35-E51, CODE E52 PRB 1 AND SKIP TO F1.

DY4G E52 Did you ever talk to a doctor about the problems you were having during this period of depression -- problems like (SX CODED 5 IN E35-E51)? PRB: 1 2 3 4 5

CONTINUE PROBING.

MD: _____ OTHER: _____

IF CODED 5, BUT RESPONDENT VOLUNTEERS SOME PROBLEMS DUE SOLELY TO PHYSICAL ILLNESS, LIST THOSE PROBLEMS.

IF CODED 5, BUT RESPONDENT VOLUNTEERS SOME PROBLEMS DUE SOLELY TO MEDICATION, DRUGS, OR ALCOHOL, LIST THOSE PROBLEMS.

DY4ON
DYS10ON

E53

ONS: When did your first period of two years or longer begin where you felt sad or depressed and had some of these other problems like (SX CODED 5 IN E35-E51 AND NOT ATTRIBUTED SOLELY TO PHYSICAL ILLNESS OR MEDICATION, DRUGS OR ALCOHOL)?

AGE ONS:

____/____

DY4RE
DYS10RE

REC: When did your last period like that end?

REC:

1 2 3 4 5 6

AGE REC:

____/____

E54 IF D69 AGE ONS BLANK OR LESS THAN E53
AGE ONS, SKIP TO F1.

GA4F

You said earlier that you had a long period when you
were anxious and worrying about several different
things. Did this whole period of feeling anxious and
worried fall within one of these long periods when
you were depressed most of the time?

NO.....
YES.....

SECTION J

J1 **HAND CARD J1 TO RESPONDENT.** Now I am going to ask some questions about your use of alcoholic beverages like (BEVERAGES USED LOCALLY - BEER, WINE, OR LIQUOR). In your entire lifetime, have you had at least 12 drinks of any kind of alcoholic beverage? Please count drinks as shown on this card.

NO 1
YES..... (SKIP TO J2)..... 5

A. So, you've never had at least 12 drinks even if you count drinking on special occasions or holidays?

CORRECT, NEVER HAD 12+ DRINKS . .(SKIP TO K1)..... 1
HAS HAD 12+ DRINKS 5

J2 In the past 12 months, did you have at least 12 drinks of any kind of alcoholic beverage?

NO 1
YES..... (SKIP TO J3)..... 5

A. What about in the past, in any one-year period of your entire life, did you have at least 12 drinks of any kind of alcoholic beverage?

NO(SKIP TO K1) 1
YES.....(SKIP TO J5A)..... 5

J3 In the past 12 months, did you have at least one drink... (CODE FIRST YES)

almost every day?..... 1
3 or 4 days a week?..... 2
1 or 2 days a week?..... 3
1 to 3 days a month?..... 4
less than once a month?..... 5

J4 On days when you drank an alcoholic beverage in the past 12 months, about how many drinks did you usually have in a single day? RECORD R'S ANSWER VERBATIM AND CODE # DRINKS USING CARD J1. _____

AVG. # DRINKS IN $\frac{\quad}{24}$ HRS

J5 Now thinking about your whole life, has there ever been a year when you drank more than you did during the past 12 months?

NO(SKIP TO C) 1
YES..... 5

A. Focusing on the period when you drank the most, how often did you drink? Was it.. (CODE FIRST YES)

almost every day?..... 1
3 or 4 days a week?..... 2
1 or 2 days a week?..... 3
1 to 3 days a month?..... 4
less than once a month?..... 5

B. During that year when you were drinking the most, on the days when you drank, about how many drinks would you usually have in a day? RECORD R'S ANSWER VERBATIM AND CODE # DRINKS USING CARD J1. _____

AVG. # DRINKS IN $\frac{\quad}{24}$ HRS

C. When did you first begin to drink (FREQUENCY AND AMOUNT IN A AND B, OR IF BLANK, IN J3 AND J4)?

ONS: 1 2 3 4 5 6
AGE ONS: _____ / _____

D. When did you last drink (FREQUENCY AND AMOUNT IN A AND B, OR IF BLANK, IN J3 AND J4)?

REC: 1 2 3 4 5 6
AGE REC: _____ / _____

AA4A1 J6 Was there ever a time in your life when your drinking or being hung over frequently interfered with your work at school, on a job, or at home?

NO 1
YES..... 5

J7 Was there ever a time in your life when you frequently got into physical fights while drinking?

NO 1
YES..... 5

A. Did your drinking frequently cause trouble between you and a family member or friend?

NO 1
YES..... 5

IF J7 AND J7A BOTH CODED 1, SKIP TO J8.

AA4A4 B. Did you continue to drink after you knew that it was causing you problems in getting along with other people?

NO 1
YES..... 5

AA4A3 J8 Have you ever been arrested for disturbing the peace or for driving while under the influence of alcohol?

NO 1
YES..... 5

AA4A2 J9 Have there been times in your life when you have often been under the influence of alcohol in situations where you could get hurt, for example when riding a bicycle, driving, operating a machine, or anything else?

NO 1
YES..... 5

J10 IF NO 5 CODED IN J6-J9, SKIP TO J11.

AA4ON
AA4RE ONS/REC: When was the (first/last) time (SX CODED 5 IN J6-J9)?

ONS: 1 2 3 4 5 6
AGE ONS: _____ / _____
REC: 1 2 3 4 5 6
AGE REC: _____ / _____

AD41A AD10A4	J11	Was there ever a time when you <u>had to drink much more than you used to to get the effect you wanted?</u>	NO 1 YES..... (SKIP TO J12).....5*
AD41B AD10A4	A.	Did you ever <u>find that the same amount of alcohol had less effect</u> on you than it once did?	NO 1 YES.....5*
AD10A1	J12	Was there ever a time when you <u>felt such a strong desire or urge to drink that you could not keep from drinking?</u>	NO 1 YES..... (SKIP TO J13).....5*
AD10A1	A.	Did you ever <u>want a drink so badly that you could not think of anything else?</u>	NO 1 YES.....5*
AD43 AD10A2	J13	Has there ever been a period in your life when you often <u>had more to drink than you intended to?</u>	NO 1 YES..... (SKIP TO J14).....5*
AD43 AD10A2	A.	Was there ever a period when you often kept <u>drinking much longer than you intended to?</u>	NO 1 YES.....5*
AD44 AD10A2	J14	Have there been times in your life when you <u>wanted to stop or cut down on your drinking?</u>	NO..... 1 YES.....5*
AD44 AD102	A.	Have you more than once <u>tried to stop or cut down but found you could not?</u>	NO 1 YES.....5*
AD45 AD10A5	J15	Was there ever a period in your life when you <u>spent a great deal of time drinking or getting over the effects of alcohol?</u>	NO 1 YES.....5*
AD46 AD10A5	J16	Did drinking ever cause you to <u>give up or greatly reduce important activities</u> -- like participating in sports, going to school or work, or keeping up with friends or relatives?	NO 1 YES.....5*

AD42A AD10A3	J17	I'm going to ask you about some problems you might have had in the first few days after you quit or cut down. HAND CARD J2 TO RESPONDENT. IF VOLUNTEERS NEVER QUIT OR CUT DOWN, CODE J17.1 = 6 AND SKIP TO B. OTHERS READ ITEMS 1-11 AND CODE FOR EACH.	NO	YES	NEVER QUIT
AW10B1/AW4B2	1.	For instance, in those first few days, did you have the shakes (hands trembling)?	1	5	6
AW10B7/AW4B3	2.	did you have more trouble sleeping than is usual for you?	1	5	
AW4B7	3.	were you more nervous than is usual for you?	1	5	
AW10B5/AW4B6	4.	did you feel more restless than is usual for you?	1	5	
AW10B2/AW4B1	5.	did you sweat?	1	5	
AW10B4/AW4B1	6.	did you feel your heart beating fast?	1	5	
AW10B3/AW4B4	7.	did you have nausea or vomiting?	1	5	
AW10B6	8.	did you have headaches?	1	5	
AW10B8	9.	did you feel weak?	1	5	
AW10B9/AW4B5	10.	did you see, hear, or feel things that others could not?	1	5	
AW10B10/AW4B8	11.	did you have a seizure?	1	5	
	A.	ARE TWO OR MORE 5'S CODED IN 1-11?	NO1 YES..... (SKIP TO J18).....5*		
		<u>SX = stopping or cutting down caused problems</u>			
AD10A3 AD42B	B.	Did you ever <u>take a drink to keep from having these problems</u> (or drink to make them go away)?	NO1 YES.....5*		

AHM10AB	J18	HAND CARD J3 TO RESPONDENT. In your lifetime, has <u>drinking</u> ever <u>caused</u> you to have any of the <u>medical problems</u> on the card like:	NO	YES
		1. liver disease or hepatitis?	1	5
		2. stomach disease or vomiting blood?	1	5
		3. tingling feet or numbness?	1	5
		4. memory problems even when you weren't drinking?	1	5
		5. pancreatitis?	1	5
		6. any other disease? What? _____	1	5

IF ANY 5 CODED IN 1-6, ASK A. OTHERS SKIP TO J19.

AD47 AD10A6	A.	Did you <u>continue to drink after you knew that it was causing a medical problem</u> ?	NO1	YES.....5*
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AD47 AD10A6	J19	Did you <u>continue to drink when you knew you had any (other) serious physical illness</u> that was made worse by drinking?	NO1	YES.....5*
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AHM10AB	J20	HAND CARD J4 TO RESPONDENT. Has <u>alcohol</u> ever <u>caused</u> you to have any of the <u>emotional or psychological problems</u> on the card, like:	NO	YES
		1. being uninterested in your usual activities?	1	5
		2. being depressed?	1	5
		3. being suspicious or distrustful of others?	1	5
		4. or having strange thoughts?	1	5

IF ANY 5 CODED IN 1-4, ASK A. OTHERS SKIP TO B.

AD47 AD10A6	A.	Did you <u>continue to drink after you knew that it was causing you emotional or psychological problems</u> ?	NO1	YES.....5*
----------------	----	---	-----------	------------

B.	ARE THREE OR MORE SX CODED 5* IN J11-J20?	NO.....(SKIP TO J23).....1	YES.....5
----	---	----------------------------	-----------

J21	You said that (LIST ITEMS CODED 5* IN J11-J20). Was there ever a time in your life when you had three or more of these problems in the same year?	NO.....(SKIP TO J23).....1 YES.....5
-----	---	---

J22	ONS/REC: When was the (first/last) time you had three or more of these problems from drinking in the same year?	ONS: 1 2 3 4 5 6 AGE ONS: /_____ REC: 1 2 3 4 5 6 AGE REC: /_____ ____/____
-----	---	--

J23 IF NO 5* CODED IN J11-J20, SKIP TO K1

	ONS/REC: When was the (first/last) time you had any of the problems you mentioned?	ONS: 1 2 3 4 5 6 AGE ONS: /_____ REC: 1 2 3 4 5 6 AGE REC: /_____ ____/____
--	---	--

SECTION K

OCO10A OCO10B OBS4A4 OBS4A1 OBS4A2	K1	I want to ask you next about whether you have ever been bothered by having certain unpleasant thoughts of your own that kept entering your mind against your wishes. An example would be the persistent idea that your hands are dirty or have germs on them. Have you ever had any unpleasant thoughts like that?	NO1 YES.....5
--	----	--	------------------------

OCO10A OCO10B OBS4A1 OBS4A2 OBS4A4	A.	Another example of an unpleasant thought would be the persistent idea that you might harm someone, even though you really didn't want to. Or you might have had thoughts you were ashamed of, but couldn't keep out of your mind. Have you ever had any unpleasant and persistent thoughts like that?	NO1 YES.....5
	B.	IS EITHER K1 OR K1A CODED 5?	NO(SKIP TO K9).....1 YES.....5

OCO10A	K2	Did you have these thoughts only for a short time or did they ever bother you again and again over a period of at least 2 weeks?	LESS THAN 2 WEEKS(SKIP TO K9).....1 2 WEEKS OR MORE5
--------	----	--	--

OBS4D K3 Could you give me examples of the kind of thoughts that bothered you?

EX: _____

ARE ALL EXAMPLES EXCLUSIVELY DESCRIBING:

	NO	YES
1) FEELINGS OF GUILT?	1	5
2) CONCERNS ABOUT BODY SHAPE, WEIGHT, OR EATING?	1	5
3) CONCERNS ABOUT GETTING, USING, OR RECOVERING FROM DRUGS OR OTHER SUBSTANCES?	1	5
4) CONCERNS ABOUT HAIR-PULLING?	1	5
5) CONCERNS ABOUT A SERIOUS ILLNESS?	1	5
6) SOME COMBINATION OF 1-5?	1	5

IF ANY CODED 5, SKIP TO K9.

OCO10B2 OBS4B K4 Did some of these thoughts seem to you to be unreasonable? NO 1 YES.....5

A. Were you thinking about these things more than you should have? NO 1 YES.....5

OCO10B4 B. When you thought about these things, did you enjoy it? NO 1 YES.....5

OCO10B3 OBS4A3 OBS4A1 OBS4E K5 Did these thoughts keep coming back again and again into your mind no matter how hard you tried to resist, ignore, or get rid of them? PRB: 1 3 4 5

IF NO, CODE PRB 1 AND SKIP TO K9. IF YES, PROBE.

MD: _____ OTHER: _____

IF NOT CODED PRB 5, SKIP TO K9.

OBS4C K6 Did these thoughts often bother you for more than an hour at a time? NO 1 YES.....5

OBS4C OCO10C K7 Did thinking about these ideas interfere with your life or work, or cause you difficulty with your relatives or friends, or upset you a great deal? NO 1 YES.....5

K8 ONS/REC: When was the (first/last) time you were unable to put an unpleasant thought like that out of your mind? ONS: 1 2 3 4 5 6 AGE ONS: / REC: 1 2 3 4 5 6 AGE REC: /

OCC10A COM4A1 K9 Some people have the unpleasant feeling that they have to do something over and over again, even though they know it is foolish, but they can't resist doing it – things like washing their hands again and again or going back several times to be sure they've locked a door or turned off the stove. NO 1 YES.....5

Have you ever had to do something like that over and over?

IF CODED 5, ASK FOR EXAMPLE:

EX: _____

OCC10A
COM4A1 K10 Was there a time when you felt you had to do something in a certain order, like getting dressed perhaps, and had to start all over again if you did it in the wrong order? NO1
YES.....5

IF CODED 5, ASK FOR EXAMPLE:

EX: _____

OCC10A
COM4A1 K11 Has there ever been a period of several weeks when you felt you had to count something, like the squares in a tile floor, and couldn't resist doing it even when you tried to? NO1
YES.....5

IF CODED 5, ASK FOR EXAMPLE:

EX: _____

COM4A1
OCC10A K12 Did you ever have a period when you had to say certain words over and over, either aloud or to yourself? NO1
YES.....5

IF CODED 5, ASK FOR AN EXAMPLE.

EX: _____

IF K9-K12 ALL CODED 1, SKIP TO K22.

OCC10B2
COM4B K13 You mentioned that you had to (SX CODED 5 IN K9-K12). Did you think that this was unnecessary or that you overdid it? NO1
YES.....5

OCC10B3 K14 Did you try hard not to do these things, but did they anyway? NO, COULD CONTROL.....1
DIDN'T TRY, SO DK3
YES.....5

COM4A2 K15 Would you feel very uncomfortable if you did not do these things? NO1
YES.....5

A. Did you feel that something bad might happen if you didn't do them? NO1
YES.....5

OCC10B4 . K16 When you did these things, did you enjoy doing them? NO
YES.....

COM4E K17 Did you tell a doctor about having to (SX CODED 5 IN K9-K12)? CONTINUE PROBING. PRB: 3 4 5

MD: _____ OTHER: _____

K18 ONS/REC: When was the (first/last) time you had to do (this/any of these things)?
ONS: 1 2 3 4 5
AGE ONS: _____ / _____
REC: 1 2 3 4 5
AGE REC: _____ / _____

OCC10C COM4C K19 Did having to (SX CODED 5 IN K9-K12) ever interfere with your life or work, or cause you difficulty with your relatives or friends, or upset you a great deal? NO
YES.....

OCC10A K20 Did you have to do any of those things most days over a period of at least two weeks? NO
YES.....

COM4C K21 Did you often spend more than an hour a day doing these things? NO
YES.....

PT10A
PT4A1

K22 Now I would like to ask you about extremely stressful or upsetting events that sometimes occur to people. HAND CARD K1 TO RESPONDENT. Some events like that are listed on Card K1.

ASK K22.1-K22.11. CODE IN COL. I.

	COL. I		COL. II WORST EVENT	
	NO	YES	NO	YES
1. Did you ever have direct combat experience in a war?	1	5	1	5
2. Were you ever involved in a life-threatening accident?	1	5	1	5
3. Were you ever involved in a fire, flood or other natural disaster?	1	5	1	5
4. Did you ever witness someone being badly injured or killed?	1	5	1	5
5. Were you ever raped, that is someone had sexual intercourse with you when you did not want to, by threatening you, or using some degree of force?	1	5	1	5
6. Were you ever sexually molested, that is someone touched or felt your genitals when you did not want them to?	1	5	1	5
7. Were you ever seriously physically attacked or assaulted?	1	5	1	5
8. Have you ever been threatened with a weapon, held captive, or kidnapped?	1	5	1	5
9. Have you ever been tortured or the victim of terrorists?	1	5	1	5
10. Have you ever experienced any other extremely stressful or upsetting event?	1	5	1	5
<p>IF YES, ASK: Briefly, what was the most stressful or upsetting experience of this sort that ever happened to you? DESCRIPTION: _____</p>				
<p>IF OTHER EVENTS IN 10 ARE ONLY BEREAVEMENT, CHRONIC ILLNESS, BUSINESS LOSS, MARITAL OR FAMILY CONFLICT, BOOK, MOVIE, OR TELEVISION, CODE 1. OTHERS CODE 5.</p>				

11. Have you ever suffered a great shock because one of the events on the list happened to someone close to you?	1	5	1	5
--	---	---	---	---

IF YES, ASK: Briefly, what was the event that you found most stressful or upsetting when it happened to someone close to you?

DESCRIPTION: _____

IF EVENTS IN 11 ARE ONLY BEREAVEMENT, CHRONIC ILLNESS, BUSINESS LOSS, MARITAL OR FAMILY CONFLICT, BOOK, MOVIE, OR TELEVISION, CODE 1. OTHERS CODE 5.

IF NO 5'S IN COL. I, SKIP TO L1

IF ONLY ONE 5 IN COL. I CODE 5 FOR THAT EVENT IN COL. II AND ASK K22A.1. OTHERS SKIP TO K22A.2

- K22A**
1. You mentioned that you have experienced (EVENT CODED 5 IN COL. I). Did this happen only once in your lifetime or more than once? IF ONCE, SKIP TO K22B, OTHERS ASK: Of these times, was one of them more stressful or upsetting than the others? SKIP TO K22B.
 2. You said that you have experienced (EVENTS CODED 5 IN COL. I). Of those events, which was the most stressful or upsetting? CODE 5 FOR THAT EVENT IN COL. II.

K22B FOR EVENT CODED 5 IN COL. II, ASK: How old were you when (EVENT) happened?

AGE: ___/___

K22C FOR EVENT CODED 5 IN COL. II, ASK: When it happened, did you feel terrified?

NO..... 1
YES..... 5

K22D FOR EVENT CODED 5 IN COL. II, ASK: When (EVENT) happened, did you feel helpless?

NO..... 1
YES..... 5

Now I would like to ask you about the time after the stressful or upsetting experience happened to you.

ASK K23 TO K45 FOR EVENT CODED 5 IN COL. II..

PT10B PT4B1	K23	Did you keep <u>remembering</u> (EVENT) even <u>when you didn't want to</u> ?	NO..... 1 YES..... 5
----------------	-----	---	-------------------------

PT10B PT4B2	K24	After it, did you keep <u>having bad dreams or nightmares</u> about it?	NO..... 1 YES..... 5
----------------	-----	---	-------------------------

PT10B PT4B3	K25	Did you suddenly act or <u>feel as though</u> (EVENT) was <u>happening again</u> even though it wasn't?	NO..... 1 YES..... 5
----------------	-----	---	-------------------------

PT10B PT4B4	K26	Did you <u>get very upset</u> when you were reminded of it?	NO..... 1 YES..... 5
----------------	-----	---	-------------------------

PT10B PT4B5	K27	Did you <u>sweat</u> or did your <u>heart beat fast</u> or did you <u>tremble</u> when you were reminded of (EVENT)?	NO..... 1 YES..... 5
----------------	-----	--	-------------------------

IF K23 TO K27 ALL CODED 1, SKIP TO L1.

PT10D2 PT4D1	K28	After (EVENT) did you have <u>trouble sleeping</u> ?	NO..... 1 YES..... 5
-----------------	-----	--	-------------------------

PT10D2 PT4D2	K29	After it, did you feel unusually <u>irritable</u> or <u>lose your temper</u> a lot more than is usual for you?	NO..... 1 YES..... 5
-----------------	-----	--	-------------------------

PT10D2 PT4D3	K30	After <u>it</u> , did you have <u>difficulty concentrating</u> ?	NO..... 1 YES..... 5
-----------------	-----	--	-------------------------

PT10D2 PT4D4	K31	After (EVENT) did you become <u>very much more concerned</u> about <u>danger</u> or very much more careful?	NO..... 1 YES..... 5
-----------------	-----	---	-------------------------

PT10D2 PT4D5	K32	After (EVENT) did you become <u>jumpy</u> or <u>easily startled</u> by ordinary noises or movements?	NO..... 1 YES..... 5
-----------------	-----	--	-------------------------

IF K28 TO K32 ALL CODED 1, SKIP TO L1.

PT10C PT4C1	K33	Did you deliberately <u>try not to think or talk about (EVENT)?</u>	NO..... 1 YES..... 5
----------------	-----	---	-------------------------

PT10C PT4C2	K34	Did you <u>avoid places or people or activities that might have reminded you of it?</u>	NO..... 1 YES..... 5
----------------	-----	---	-------------------------

PT10D1 PT4C3	K35	After (EVENT) was your <u>memory blank</u> for all or part of (EVENT)?	NO..... (SKIP TO K36) ... 1 YES..... 5
-----------------	-----	--	---

IF EVENT CODED 5 IN COL II. IS WITNESS OF AN ACCIDENT (K22.4) OR EVENT HAPPENED TO RELATIVES OR FRIENDS (K22.11), SKIP TO K36.
OTHERS ASK:

A. Did you suffer a head injury as a result of (EVENT)?	NO..... 1 YES..... 5
---	-------------------------

B. Were you unconscious for more than ten minutes?	NO..... 1 YES..... 5
--	-------------------------

PT4C4	K36	After (EVENT) did you <u>lose interest in doing things that were once important</u> or enjoyable for you?	NO..... 1 YES..... 5
-------	-----	---	-------------------------

PT4C5	K37	After (EVENT) did you <u>feel more isolated or distant from other people?</u>	NO..... 1 YES..... 5
-------	-----	---	-------------------------

PT4C6	K38	After (EVENT) did you find you had more <u>difficulty experiencing normal feelings</u> such as love or affection towards other people?	NO..... 1 YES..... 5
-------	-----	--	-------------------------

PT4C7	K39	After (EVENT) did you begin to <u>feel that there was no point in thinking about the future</u> anymore?	NO..... 1 YES..... 5
-------	-----	--	-------------------------

IF K33 TO K39 ALL CODED 1, SKIP TO L1.

PT10E PT40N PT100N	K40	You said that you had problems after (EVENT) like (SX CODED 5 IN K23 TO K39). How soon after (EVENT) did you start to have any of these problems? CODE LOWEST NUMBER.	SAME DAY 1 THAT WEEK 2 THAT MONTH 3 WITHIN 6 MONTHS 4 WITHIN 1 YEAR 5 MORE THAN 1 YEAR 6
		IF MORE THAN 1 YEAR, ASK: How old were you?	AGE: ___ / ___
PT4E	K41	How long did you continue to have any of these problems because of (EVENT)? CODE LOWEST NUMBER.	LESS THAN 1 WEEK 1 LESS THAN 1 MONTH 2 LESS THAN 6 MONTHS 3 LESS THAN 1 YEAR 4 MORE THAN 1 YEAR 5
PT10RE PT4RE	K42	When was the last time you had any of these problems as a result of (EVENT)?	REC: 1 2 3 4 5 6 AGE REC: ___ / ___
	K43	Did you tell a doctor about the problems that occurred as a result of (EVENT)?	NO 1 YES (SKIP TO 2) 5
	1.	Did you tell any other professional?	NO 1 YES 5
	2.	Did you take medication, or use drugs or alcohol more than once for the problems which occurred as a result of it?	NO 1 YES 5
	3.	Did the problems which occurred as a result of it interfere with your life or activities a lot?	NO 1 YES 5
PT4F	K44	Have you ever been very upset with yourself for having the problems which occurred as a result of (EVENT)?	NO 1 YES 5
PT4F	K45	Have the problems which occurred as a result of (EVENT) ever kept you from going to a party, social event or meeting?	NO 1 YES 5

SECTION L

L1 Now I'd like to ask about your experience with medicines. (HAND CARD L1 TO RESPONDENT).

Look at the medicines at the top of the card in Part A.
Has a doctor ever prescribed any of them for you? NO.....(GO TO L2)..... 1
YES..... 5

A. Did you ever use any of these medicines in Part A in larger amounts than was prescribed or for a longer period than was prescribed? NO.....(GO TO L2)..... 1
YES..... 5

B. Which ones? (Any others?) CONTINUE ASKING UNTIL R SAYS NO.

CIRCLE NAME IN 2A, 3A, OR 4A IN L4 AND CODE 5 FOR THAT CATEGORY IN COLUMN A.

L2 Have you used any of these medicines in Part A more than five times when they were **not** prescribed for you, to get high, to relax, or to make you feel better, more active, or alert? NO..... (SKIP TO L3) 1
YES..... 5

A. Which ones? (Any others?) CONTINUE ASKING UNTIL R SAYS NO.

CIRCLE NAME IN 2, 3, OR 4 IN L4 AND CODE 5 FOR THAT CATEGORY IN COLUMN A.

L3 Now I'd like to ask about your experience with other drugs. Look at the drugs in Part B on the card. Have you ever taken any of those more than 5 times? NO.....(GO TO L4)..... 1
YES..... 5

A. Which ones? (Any others?) CONTINUE ASKING UNTIL R SAYS NO.

CIRCLE NAME IN 1, 2, 4-8 IN L4 AND CODE 5 FOR THAT CATEGORY IN COLUMN A.

L4 Have you ever taken any other drugs not on the list more than 5 times to get high, to relax, or to make you feel better, more active, or alert? NO(GO TO L5)
 YES

A. Which ones? ENTER NAME IN 9 BELOW AND CODE 5 FOR THAT CATEGORY IN COLUMN A. ASK: Any others? CONTINUE ASKING UNTIL R. SAYS NO AND CODE 5 FOR THAT CATEGORY IN COLUMN A.

		A		B					
		NO	YES	ROUTE					
1)	MARIJUANA, HASHISH, BHANG, GANJA	1	5	1	2	3	4	5	6
2)	STIMULANTS: AMPHETAMINES, KHAT, BETEL NUT	1	5	1	2	3	4	5	6
2A)	PRESCRIPTION STIMULANTS: AMPHETAMINES	1	5						
3)	SEDATIVES: TRANQUILIZERS, SLEEPING PILLS, BARBITURATES, SECONAL, VALIUM, LIBRIUM, XANAX, QUAALUDES	1	5	1	2	3	4	5	6
3A)	PRESCRIPTION SEDATIVES: TRANQUILIZERS, SLEEPING PILLS, BARBITURATES, SECONAL, VALIUM, LIBRIUM, XANAX, QUAALUDES	1	5						
4)	OPIOIDS: HEROIN, CODEINE, DEMEROL, MORPHINE, PERCODAN, METHADONE, DARVON, OPIUM, DILAUDID	1	5	1	2	3	4	5	6
4A)	PRESCRIPTION OPIOIDS: HEROIN, CODEINE, DEMEROL, MORPHINE, PERCODAN, METHADONE, DARVON, OPIUM, DILAUDID	1	5						
5)	COCAINE, CRACK, COCA LEAVES	1	5	1	2	3	4	5	6
6)	PCP	1	5	1	2	3	4	5	6
7)	PSYCHEDELICS: LSD, MESCALINE, PEYOTE, PSILOCYBIN, DMT	1	5	1	2	3	4	5	6
8)	INHALANTS/SOLVENTS: GLUE, TOLUENE, GASOLINE	1	5	1	2	3	4	5	6
9)	OTHER: WHICH? _____	1	5	1	2	3	4	5	6

L5 INTERVIEWER: CODE 1 IN ALL CATEGORIES NOT CODED 5. IF NO 5'S IN COLUMN A, SKIP TO M1. IF ANY 5'S, CIRCLE THE DRUGS CODED IN L4 ON CARD L2. HAND CARD L2 TO RESPONDENT FOR USE THROUGHOUT REMAINDER OF SECTION. CIRCLE SAME ON CARD L1 FOR YOUR USE.

Now, please look at Card L2. In the next questions I will be asking about categories of drugs, and when I say (DRUG CATEGORY), I want you to think about all the drugs circled in that category: NAME DRUGS CIRCLED IN DRUG CATEGORY.

L6 FOR EACH DRUG CATEGORY CODED 5 IN COLUMN A, ASK:
Please look at the bottom of Card L2. This is a list of various ways that people take medicines and drugs. What are all the ways you have taken (DRUG CATEGORY)?

CODE ALL THAT APPLY IN COLUMN B OF L4.

VEIN, IV	= 6	SNORT, SNIFF	= 3
UNDER SKIN, MUSCLE	= 5	BY MOUTH: PILLS, DRINKING CHEWING	= 2
SMOKE, FREEBASE	= 4	OTHER	= 1

L7 Think about the period of time when you were using (DRUG CATEGORY) the most frequently. At that time, about how often did you use (it/them)? Was it almost every day (PAUSE), 3 or 4 days a week (PAUSE), 1 or 2 days a week (PAUSE), 1 to 3 days a month (PAUSE), or less than once a month? (CODE FIRST "YES")

- A. How old were you when you first began to use (DRUG CATEGORY) that frequently?
- B. How old were you when you last used (DRUG CATEGORY) that frequently?
- C. When did you last use (DRUG CATEGORY) at all?

1) Marijuana

- 1) Almost every day?
- 2) 3 or 4 days a week?
- 3) 1 or 2 days a week?
- 4) 1 to 3 days a month?
- 5) less than once a month?

- 1
- 2
- 3
- 4
- 5

A. ONS: 1 2 3 4 5 6
 AGE ONS: ___/___
 B. REC: 1 2 3 4 5 6
 AGE REC: ___/___
 C. REC: 1 2 3 4 5 6
 AGE REC: ___/___

2/2A) Stimulants

- 1
- 2
- 3
- 4
- 5

A. ONS: 1 2 3 4 5 6
 AGE ONS: ___/___
 B. REC: 1 2 3 4 5 6
 AGE REC: ___/___
 C. REC: 1 2 3 4 5 6
 AGE REC: ___/___

3/3A) Sedatives

- 1
- 2
- 3
- 4
- 5

A. ONS: 1 2 3 4 5 6
 AGE ONS: ___/___
 B. REC: 1 2 3 4 5 6
 AGE REC: ___/___
 C. REC: 1 2 3 4 5 6
 AGE REC: ___/___

4/4A) Opioids

- 1) Almost every day?
- 2) 3 or 4 days a week?
- 3) 1 or 2 days a week?
- 4) 1 to 3 days a month?
- 5) less than once a month?

- 1
- 2
- 3
- 4
- 5

A. ONS: 1 2 3 4 5 6
 AGE ONS: ___/___
 B. REC: 1 2 3 4 5 6
 AGE REC: ___/___
 C. REC: 1 2 3 4 5 6
 AGE REC: ___/___

5) Cocaine

- 1
- 2
- 3
- 4
- 5

A. ONS: 1 2 3 4 5 6
 AGE ONS: ___/___
 B. REC: 1 2 3 4 5 6
 AGE REC: ___/___
 C. REC: 1 2 3 4 5 6
 AGE REC: ___/___

6) PCP

- 1
- 2
- 3
- 4
- 5

A. ONS: 1 2 3 4 5 6
 AGE ONS: ___/___
 B. REC: 1 2 3 4 5 6
 AGE REC: ___/___
 C. REC: 1 2 3 4 5 6
 AGE REC: ___/___

7) Psychedelics

- 1) Almost every day?
- 2) 3 or 4 days a week?
- 3) 1 or 2 days a week?
- 4) 1 to 3 days a month?
- 5) less than once a month?

- 1
- 2
- 3
- 4
- 5

A. ONS: 1 2 3 4 5 6
 AGE ONS: ___/___
 B. REC: 1 2 3 4 5 6
 AGE REC: ___/___
 C. REC: 1 2 3 4 5 6
 AGE REC: ___/___

8) Inhalants

- 1
- 2
- 3
- 4
- 5

A. ONS: 1 2 3 4 5 6
 AGE ONS: ___/___
 B. REC: 1 2 3 4 5 6
 AGE REC: ___/___
 C. REC: 1 2 3 4 5 6
 AGE REC: ___/___

9) Other

- 1
- 2
- 3
- 4
- 5

A. ONS: 1 2 3 4 5 6
 AGE ONS: ___/___
 B. REC: 1 2 3 4 5 6
 AGE REC: ___/___
 C. REC: 1 2 3 4 5 6
 AGE REC: ___/___

L8 In your lifetime, did using any of these medicines or drugs frequently interfere with your work at school, on a job or at home? NO (SKIP TO L9).....1
 YES5*

DA41

A. Did the use of (DRUG CATEGORY) frequently interfere with your work at school, on a job or at home?

1) Marijuana	2/2A) Stimulants	3/3A) Sedatives
A. NO.....1	A. NO.....1	A. NO.....1
YES.....5#	YES.....5#	YES.....5#
4/4A) Opioids	5) Cocaine	6) PCP
A. NO.....1	A. NO.....1	A. NO.....1
YES.....5#	YES.....5#	YES.....5#
7) Psychedelics	8) Inhalants	9) Other
A. NO.....1	A. NO.....1	A. NO.....1
YES.....5#	YES.....5#	YES.....5#

L9 In your lifetime, has your use of any of these medicines or drugs ever led to problems with your family, friends, at work, or at school? NO.....1 YES.....5*

A. In your lifetime, has your use of any of these medicines or drugs ever led to problems with the police? NO.....1 YES.....5*

IF L9 AND L9A BOTH CODED 1, SKIP TO L10.

DA43

B. Did (DRUG CATEGORY) ever cause you problems with your family, friends, at work, at school, or with the police?

IF NO, CODE 1 AND GO TO NEXT CIRCLED DRUG CATEGORY. IF YES, CODE 5 AND ASK C.

DA44

C. Did you continue to use (DRUG CATEGORY) after you knew that it was causing you any of these problems?

1) Marijuana	2/2A) Stimulants	3/3A) Sedatives
B. NO.....1 YES.....5#	B. NO.....1 YES.....5#	B. NO.....1 YES.....5#
C. NO.....1 YES.....5#	C. NO.....1 YES.....5#	C. NO.....1 YES.....5#
4/4A) Opioids	5) Cocaine	6) PCP
B. NO.....1 YES.....5#	B. NO.....1 YES.....5#	B. NO.....1 YES.....5#
C. NO.....1 YES.....5#	C. NO.....1 YES.....5#	C. NO.....1 YES.....5#
7) Psychedelics	8) Inhalants	9) Other
B. NO.....1 YES.....5#	B. NO.....1 YES.....5#	B. NO.....1 YES.....5#
C. NO.....1 YES.....5#	C. NO.....1 YES.....5#	C. NO.....1 YES.....5#

L10 Have there been times when you used any of these medicines or drugs in situations where you could get hurt—for example, when riding a bicycle, driving a car or boat, operating a machine, or anything else? NO..... (SKIP TO L11)..... YES

DA42

A. Have you used (DRUG CATEGORY) in situations where you could get hurt?

1) Marijuana	2/2A) Stimulants	3/3A) Sedatives
A. NO1 YES.....5#	A. NO1 YES.....5#	A. NO1 YES.....5#
4/4A) Opioids	5) Cocaine	6) PCP
A. NO1 YES.....5#	A. NO1 YES.....5#	A. NO1 YES.....5#
7) Psychedelics	8) Inhalants	9) Other
A. NO1 YES.....5#	A. NO1 YES.....5#	A. NO1 YES.....5#

L11 IF NO 5* CODED IN L8-L10, SKIP TO L12,
OTHERS ASK:

You said you've had problems as a result of
using (DRUG CATEGORY WITH A 5#) like
(LIST ITEMS CODED 5# IN L8-L10 FOR
EACH DRUG CATEGORY).

DA4ON
D4DON
DA4RE
D4DRE

ONS: When was the first time you had one of
those problems as a result of using
(DRUG CATEGORY WITH A 5#)?

REC: When was the last time?

1) Marijuana

ONS: 1 2 3 4 5 6
AGE ONS: ___/___

REC: 1 2 3 4 5 6
AGE REC: ___/___

2/2A) Stimulants

ONS: 1 2 3 4 5 6
AGE ONS: ___/___

REC: 1 2 3 4 5 6
AGE REC: ___/___

3/3A) Sedatives

ONS: 1 2 3 4 5 6
AGE ONS: ___/___

REC: 1 2 3 4 5 6
AGE REC: ___/___

4/4A) Opioids

ONS: 1 2 3 4 5 6
AGE ONS: ___/___

REC: 1 2 3 4 5 6
AGE REC: ___/___

5) Cocaine

ONS: 1 2 3 4 5 6
AGE ONS: ___/___

REC: 1 2 3 4 5 6
AGE REC: ___/___

6) PCP

ONS: 1 2 3 4 5 6
AGE ONS: ___/___

REC: 1 2 3 4 5 6
AGE REC: ___/___

7) Psychedelics

ONS: 1 2 3 4 5 6
AGE ONS: ___/___

REC: 1 2 3 4 5 6
AGE REC: ___/___

8) Inhalants

ONS: 1 2 3 4 5 6
AGE ONS: ___/___

REC: 1 2 3 4 5 6
AGE REC: ___/___

9) Other

ONS: 1 2 3 4 5 6
AGE ONS: ___/___

REC: 1 2 3 4 5 6
AGE REC: ___/___

L12 Did you ever find that you had to use much more of any of these medicines or drugs than before to get the effect you wanted? NO 1
 YES (SKIP TO B) 5#

A. Did you ever find that the same amount of any of these medicines or drugs had less effect on you than it once did? NO (SKIP TO L13) 1
 YES ... (ASK L12B WITHOUT PARENS) 5#

B. Did you ever find (you began to need much more [DRUG CATEGORY] to get the same effect or) that the same amount of [DRUG CATEGORY] had less effect than it once had?

DD41
 DD10A4

1) Marijuana	2/2A) Stimulants	3/3A) Sedatives
B. NO 1	B. NO 1	B. NO 1
YES 5#	YES 5#	YES 5#

4/4A) Opioids	5) Cocaine	6) PCP
B. NO 1	B. NO 1	B. NO 1
YES 5#	YES 5#	YES 5#

7) Psychedelics	8) Inhalants	9) Other
B. NO 1	B. NO 1	B. NO 1
YES 5#	YES 5#	YES 5#

L13 Have you ever felt such a strong desire or urge to use any of these medicines or drugs that you could not keep from using them? NO 1
 YES (SKIP TO B).....5*

A. Did you ever want any of these medicines or drugs so badly, that you could not think of anything else? NO (SKIP TO L14)..... 1
 YES ... (ASK L13B WITHOUT PARENS).....5*

DD10A1

B. Did you ever (have such a strong desire for (DRUG CATEGORY) that you couldn't keep from using it or want (DRUG CATEGORY) so badly that you couldn't think of anything else?

1) Marijuana	2/2A) Stimulants	3/3A) Sedatives
B. NO 1	B. NO 1	B. NO 1
YES 5#	YES 5#	YES 5#

4/4A) Opioids	5) Cocaine	6) PCP
B. NO 1	B. NO 1	B. NO 1
YES 5#	YES 5#	YES 5#

7) Psychedelics	8) Inhalants	9) Other
B. NO 1	B. NO 1	B. NO 1
YES 5#	YES 5#	YES 5#

L14 Have there been times in your life when you wanted to stop or cut down on any of these medicines or drugs? NO..... (SKIP TO L15).....1
 YES5*

DD10A2

A. Have you ever wanted to stop or cut down on (DRUG CATEGORY)?

IF NO, CODE 1 AND GO TO NEXT CIRCLED DRUG CATEGORY.
 IF YES, CODE 5 AND ASK B.

DD44

B. Were you always able to cut down for at least one month?
 SX = unable to cut down for one month

1) Marijuana	2/2A) Stimulants	3/3A) Sedatives
A. NO.....1 YES.....5#	A. NO.....1 YES.....5#	A. NO.....1 YES.....5#
B. NO.....5# YES.....1	B. NO.....5# YES.....1	B. NO.....5# YES.....1
4/4A) Opioids	5) Cocaine	6) PCP
A. NO.....1 YES.....5#	A. NO.....1 YES.....5#	A. NO.....1 YES.....5#
B. NO.....5# YES.....1	B. NO.....5# YES.....1	B. NO.....5# YES.....1
7) Psychedelics	8) Inhalants	9) Other
A. NO.....1 YES.....5#	A. NO.....1 YES.....5#	A. NO.....1 YES.....5#
B. NO.....5# YES.....1	B. NO.....5# YES.....1	B. NO.....5# YES.....1

L15 Has there ever been a period when you spent a great deal of time using medicines or drugs, getting them, or getting over their effects? NO..... (SKIP TO L16).....1
YES5*

DD45
DD10A5

A. Have you ever spent a lot of your time using, getting, or getting over the effects of (DRUG CATEGORY)?

1) Marijuana	2/2A) Stimulants	3/3A) Sedatives
A. NO.....1 YES.....5#	A. NO.....1 YES.....5#	A. NO.....1 YES.....5#
4/4A) Opioids	5) Cocaine	6) PCP
A. NO.....1 YES.....5#	A. NO.....1 YES.....5#	A. NO.....1 YES.....5#
7) Psychedelics	8) Inhalants	9) Other
A. NO.....1 YES.....5#	A. NO.....1 YES.....5#	A. NO.....1 YES.....5#

L16 Have you often had periods when you used more of any of these drugs than you intended to or when you used any of these drugs for much longer periods than you intended to? NO1
YES (SKIP TO B).....5#

A. Have you often started using a medicine or drug and found it difficult to stop before you became intoxicated or high? NO (SKIP TO L17).....1
YES ... (ASK L16B WITHOUTPARENS).....5*

B. Have you often (used (DRUG CATEGORY) in larger amounts or for a longer period than you intended or) found it difficult to stop using (DRUG CATEGORY) before you became intoxicated or high?

DD43
DD10A2

1) Marijuana

2/2A) Stimulants

3/3A) Sedatives

B. NO1
YES5#

B. NO1
YES.....5#

B. NO1
YES.....5#

4/4A) Opioids

5) Cocaine

6) PCP

B. NO1
YES5#

B. NO1
YES.....5#

B. NO1
YES.....5#

7) Psychedelics

8) Inhalants

9) Other

B. NO1
YES5#

B. NO1
YES.....5#

B. NO1
YES.....5#

L17 Within a few hours or days of stopping or cutting down on any of these medicines or drugs did you ever have any of the problems like those listed on this card? HAND CARD L3 TO RESPONDENT.

NO (SKIP TO L18)..... 1
 YES 5*

D42A
D10A3

A. Did stopping or cutting down on (DRUG CATEGORY) ever cause you any of these problems?

SX = stopping or cutting down caused problems

IF NO, CODE 1 AND ASK B.
IF YES, CODE 5 AND GO TO NEXT CIRCLED DRUG CATEGORY

D42B
D10A3

B. Did you ever use this or another drug just like it to keep from having problems like those on the card?

1) Marijuana

A. NO..... 1
YES..... 5#

B. NO..... 1
YES..... 5#

2/2A) Stimulants

A. NO..... 1
YES..... 5#

B. NO..... 1
YES..... 5#

3/3A) Sedatives

A. NO..... 1
YES..... 5#

B. NO..... 1
YES..... 5#

4/4A) Opioids

A. NO..... 1
YES..... 5#

B. NO..... 1
YES..... 5#

5) Cocaine

A. NO..... 1
YES..... 5#

B. NO..... 1
YES..... 5#

6) PCP

A. NO..... 1
YES..... 5#

B. NO..... 1
YES..... 5#

7) Psychedelics

A. NO..... 1
YES..... 5#

B. NO..... 1
YES..... 5#

8) Inhalants

A. NO..... 1
YES..... 5#

B. NO..... 1
YES..... 5#

9) Other

A. NO..... 1
YES..... 5#

B. NO..... 1
YES..... 5#

L18 Have you ever had any medical problems like an accidental overdose, a persistent cough, a seizure, an infection, hepatitis, abscesses, AIDS, heart trouble, or an injury as a result of using any of these medicines or drugs? NO..... (SKIP TO L19).....1
 YES5*

DHM10

A. Did (DRUG CATEGORY) ever cause you any of these health problems?

IF NO, CODE 1 AND GO TO NEXT CIRCLED DRUG CATEGORY.
 IF YES, CODE 5 AND ASK B.

DD47
 DD10A6
 DHM10

B. Did you continue to use (DRUG CATEGORY) after you knew that it was causing you any of these health problems?

1) Marijuana	2/2A) Stimulants	3/3A) Sedatives
A. NO.....1 YES.....5	A. NO.....1 YES.....5	A. NO.....1 YES.....5
B. NO.....1 YES.....5#	B. NO.....1 YES.....5#	B. NO.....1 YES.....5#
4/4A) Opioids	5) Cocaine	6) PCP
A. NO.....1 YES.....5	A. NO.....1 YES.....5	A. NO.....1 YES.....5
B. NO.....1 YES.....5#	B. NO.....1 YES.....5#	B. NO.....1 YES.....5#
7) Psychedelics	8) Inhalants	9) Other
A. NO.....1 YES.....5	A. NO.....1 YES.....5	A. NO.....1 YES.....5
B. NO.....1 YES.....5#	B. NO.....1 YES.....5#	B. NO.....1 YES.....5#

L19 Have you ever had any emotional or psychological problems from using these medicines or drugs -- such as being uninterested in your usual activities, being depressed, suspicious or distrustful of people, or having strange thoughts?
NO (SKIP TO L20) 1
YES 5*

DHM10

A. Did (DRUG CATEGORY) ever give you any of these emotional or psychological problems?

IF NO, CODE 1 AND GO TO NEXT CIRCLED DRUG CATEGORY.
IF YES, CODE 5 AND ASK B.

DD47
D10D6
DHM10

B. Did you continue to use (DRUG CATEGORY) after you knew that it was causing you any of these emotional problems?

- | | | |
|-------------------------------|-------------------------------|-------------------------------|
| 1) Marijuana | 2/2A) Stimulants | 3/3A) Sedatives |
| A. NO 1
YES 5 | A. NO 1
YES 5 | A. NO 1
YES 5 |
| B. NO 1
YES 5# | B. NO 1
YES 5# | B. NO 1
YES 5# |
| 4/4A) Opioids | 5) Cocaine | 6) PCP |
| A. NO 1
YES 5 | A. NO 1
YES 5 | A. NO 1
YES 5 |
| B. NO 1
YES 5# | B. NO 1
YES 5# | B. NO 1
YES 5# |
| 7) Psychedelics | 8) Inhalants | 9) Other |
| A. NO 1
YES 5 | A. NO 1
YES 5 | A. NO 1
YES 5 |
| B. NO 1
YES 5# | B. NO 1
YES 5# | B. NO 1
YES 5# |

L20 Have you ever given up or greatly reduced important activities in order to get or to use a medicine or drug – activities like sports, work, or associating with friends or relatives? NO..... (SKIP TO L21)..... 1
YES5#

DD46
DD10A5

A. Did you do this to use (DRUG CATEGORY) for a whole month, or several times over two months?

SX = given up important activities to use (DRUG CATEGORY)

1) Marijuana

A. NO..... 1
YES.....5#

2/2A) Stimulants

A. NO..... 1
YES 5#

3/3A) Sedatives

A. NO..... 1
YES5#

4/4A) Opioids

A. NO..... 1
YES.....5#

5) Cocaine

A. NO..... 1
YES 5#

6) PCP

A. NO..... 1
YES5#

7) Psychedelics

A. NO..... 1
YES.....5#

8) Inhalants

A. NO..... 1
YES 5#

9) Other

A. NO..... 1
YES5#

L21	HAVE AT LEAST THREE 5* BEEN CODED IN L12-L20?	NO.....(SKIP TO L23).....1 YES.....5
-----	---	---

D40N
D4RE

L22 COUNT THE 5#'S FOR EACH DRUG CATEGORY FROM L12-L20. FOR EACH DRUG CATEGORY WITH THREE OR MORE 5#'s CODED IN L12-L20, ASK:
You said that (DRUG CATEGORY WITH 3 5#'S) caused several problems for you, like (LIST ITEMS CODED 5# IN L12-L20). Did you ever have three or more of these problems with (DRUG CATEGORY) in the same year?

IF NO, CODE 1, AND GO ON TO NEXT DRUG CATEGORY WITH THREE OR MORE 5#'s CODED IN L12-L20.
IF YES, CODE 5 AND ASK ONS/REC

ONS: How old were you the first year you had three or more of these problems from (DRUG CATEGORY WITH 3 5#'S) in the same year?

REC: How old were you the last time you had three or more of these problems from (DRUG CATEGORY WITH 3 5#'S) in the same year?

1) Marijuana

NO1
YES5

AGE ONS: /
AGE REC: /

2/2A) Stimulants

NO1
YES5

AGE ONS: /
AGE REC: /

3/3A) Sedatives

NO1
YES5

AGE ONS: /
AGE REC: /

4/4A) Opioids

NO1
YES5

AGE ONS: /
AGE REC: /

5) Cocaine

NO1
YES5

AGE ONS: /
AGE REC: /

6) PCP

NO1
YES5

AGE ONS: /
AGE REC: /

7) Psychedelics

NO1
YES5

AGE ONS: /
AGE REC: /

8) Inhalants

NO1
YES5

AGE ONS: /
AGE REC: /

9) Other

NO1
YES5

AGE ONS: /
AGE REC: /

L23 HAS AT LEAST ONE 5* BEEN CODED IN L12-L20? NO(SKIP TO M1).....1
YES5

L24 FOR EACH DRUG CATEGORY WITH ONE OR MORE 5#'s CODED IN L12-L20, ASK:

ONS: When was the first time you had a problem from (DRUG CATEGORY WITH 5#)?

REC: When was the last time?

1) Marijuana	2/2A) Stimulants	3/3A) Sedatives
ONS: 1 2 3 4 5 6	ONS: 1 2 3 4 5 6	ONS: 1 2 3 4 5 6
AGE ONS: ___/___	AGE ONS: ___/___	AGE ONS: ___/___
REC: 1 2 3 4 5 6	REC: 1 2 3 4 5 6	REC: 1 2 3 4 5 6
AGE REC: ___/___	AGE REC: ___/___	AGE REC: ___/___
4/4A) Opioids	5) Cocaine	6) PCP
ONS: 1 2 3 4 5 6	ONS: 1 2 3 4 5 6	ONS: 1 2 3 4 5 6
AGE ONS: ___/___	AGE ONS: ___/___	AGE ONS: ___/___
REC: 1 2 3 4 5 6	REC: 1 2 3 4 5 6	REC: 1 2 3 4 5 6
AGE REC: ___/___	AGE REC: ___/___	AGE REC: ___/___
7) Psychedelics	8) Inhalants	9) Other
ONS: 1 2 3 4 5 6	ONS: 1 2 3 4 5 6	ONS: 1 2 3 4 5 6
AGE ONS: ___/___	AGE ONS: ___/___	AGE ONS: ___/___
REC: 1 2 3 4 5 6	REC: 1 2 3 4 5 6	REC: 1 2 3 4 5 6
AGE REC: ___/___	AGE REC: ___/___	AGE REC: ___/___

CARD D1

Group 1

Living things:

- Insects
- Snakes
- Birds
- Other animals

Group 2

- Heights
- Storms
- Thunder or lightning
- Being in still water like a swimming pool or lake

Group 3

- Flying
- Closed spaces:
- Caves
- Tunnels
- Elevators

Group 4

- Seeing blood
- Getting an injection
- Going to the dentist
- Going to a hospital

1. heart pound or race
2. sweat
3. tremble or shake
4. a dry mouth
5. short of breath
6. feel like you were choking
7. pain or discomfort in your chest
8. nausea or discomfort in your stomach
9. dizzy or feeling faint
10. feel that you or things around you were unreal
11. afraid that you might lose control of yourself, act in a crazy way, or pass out
12. afraid that you might die
13. hot flushes or chills
14. numbness or tingling sensations

CARD D2

- 1. Eating or drinking where someone could watch you**
- 2. Talking to people because you might have nothing to say or might sound foolish**
- 3. Writing while someone watches**
- 4. Taking part or speaking in a meeting or class**
- 5. Going to a party or other social outing**
- 6. Giving a speech or speaking in public**
- 7. Any other situation where you could be the centre of attention**

- 1. heart pound or race**
- 2. sweat**
- 3. tremble or shake**
- 4. a dry mouth**
- 5. short of breath**
- 6. feel like you were choking**
- 7. pain or discomfort in your chest**
- 8. dizzy or feeling faint**
- 9. feel that you or things around you were unreal**
- 10. afraid that you might lose control of yourself,
act in a crazy way, or pass out**
- 11. afraid that you might die**
- 12. have hot flushes or chills**
- 13. have numbness or tingling sensations**

CARD D3

- 1. Being outside your home alone**
- 2. Travelling in a bus, train, or car**
- 3. Being in a crowd or standing in a line**
- 4. Being in a public place, like a shop**

- 1. heart pound or race**
- 2. sweat**
- 3. tremble or shake**
- 4. a dry mouth**
- 5. short of breath**
- 6. feel like you were choking**
- 7. pain or discomfort in your chest**
- 8. nausea or discomfort in your stomach**
- 9. dizzy or feeling faint**
- 10. feel that you or things around you were unreal**
- 11. afraid that you might lose control of yourself, act in a crazy way, or pass out**
- 12. afraid that you might die**
- 13. have hot flushes or chills**
- 14. have numbness or tingling sensations**

CARD D4

- 1. heart pound or race**
- 2. sweat**
- 3. tremble or shake**
- 4. a dry mouth**
- 5. short of breath**
- 6. feel like you were choking**
- 7. pain or discomfort in your chest**
- 8. nausea or discomfort in your stomach**
- 9. dizzy or feeling faint**
- 10. feel that you or things around you were unreal**
- 11. afraid that you might lose control of yourself,
act in a crazy way, or pass out**
- 12. afraid that you might die**
- 13. have hot flushes or chills**
- 14. have numbness or tingling sensations**

CARD D5

1. restless
2. feel keyed up or on edge
3. easily tired
4. difficulty keeping your mind on what you were doing
5. more irritable than usual
6. tense, sore, or aching muscles
7. trouble falling or staying asleep
8. heart pound or race
9. sweat
10. tremble or shake
11. have a dry mouth
12. short of breath
13. feel like you were choking
14. pain or discomfort in your chest
15. pain or discomfort in your stomach
16. nausea
17. dizzy or lightheaded
18. feel that you or things around you were unreal
19. afraid that you might lose control of yourself,
act in a crazy way, or pass out
20. afraid that you might die
21. hot flushes or chills
22. numbness or tingling sensations
23. feel like you had a lump in your throat
24. easily startled

CARD J1**ALCOHOL EQUIVALENTS****HARD LIQUOR OR SPIRITS**

1 highball, shot glass, or mixed drink,	=	1 drink
1/2 pint of spirits (gin, whiskey, rum, vodka)	=	6 drinks
1 pint of spirits	=	12 drinks
1 fifth of spirits	=	20 drinks
1 quart of spirits	=	24 drinks

WINE

1 glass of wine	=	1 drink
1 bottle of wine	=	6 drinks
1 "wine cooler"	=	1 drink
1 glass of sherry or port wine	=	2 drinks

BEER

1 bottle of beer (12 oz.)	=	1 drink
1 six-pack	=	6 drinks

1 drink = approximately 9 gm absolute alcohol

CARD J2

the shakes (hands trembling)

trouble sleeping

feeling very nervous

feeling very restless

sweating

fast heart beat

nausea or vomiting

headaches

weakness

see, hear, or feel things that others could not

seizures

CARD J3

liver disease or hepatitis

stomach disease or vomiting blood

tingling or numbness

memory problems even when not drinking

pancreatitis

any other disease

CARD J4

being uninterested in your usual activities

being depressed

being suspicious or distrustful of others

having strange thoughts

CARD K1

- 1. Direct combat experience in a war**
- 2. Life-threatening accident**
- 3. Fire, flood, or natural disaster**
- 4. Witnessed someone being badly injured or killed**
- 5. Rape, that is, someone had sexual intercourse with you when you did not want to, by threatening you or using some degree of force**
- 6. Sexual molestation, that is, someone touched or felt your genitals when you did not want them to**
- 7. Serious physical attack or assault**
- 8. Threatened with a weapon, held captive, or kidnapped**
- 9. Torture or terrorism**
- 10. Any other extremely stressful or upsetting event**
- 11. A great shock because one of the events on the list happened to someone close to you**

CARD L1

a: MEDICINES

Sleeping pills	Quaaludes	Percodan
Stimulants	Sedatives	Amphetamines
Tranquilizers	Barbiturates	Demerol
Valium	Seconal	Morphine
Librium	Codeine	Methadone
Xanax	Darvon	Dilaudid

b: DRUGS

Betel nut	Gasoline	Crack
Marijuana	Toluene	Heroin
Coca leaves	Peyote	DMT
Hashish	Mescaline	PCP
Khat	LSD	Glue
Ganja	Psilocybin	
Bhang	Opium	
Inhalants	Cocaine	

CARD L2

Medicines and drugs used more than five times when they were not prescribed for you:

<u>Marijuana</u>	Marijuana, Hashish, Bhang, Ganja
<u>Stimulants</u>	Amphetamines, Khat, Betel Nut
<u>Sedatives</u>	Tranquilizers, Sleeping Pills, Barbiturates, Seconal, Valium, Librium, Xanax, Quaaludes
<u>Opioids</u>	Heroin, Codeine, Demerol, Morphine, Percodan, Methadone, Darvon, Opium, Dilaudid
<u>Cocaine</u>	Cocaine, Crack, Coca Leaves
<u>PCP</u>	PCP
<u>Psychedelics</u>	LSD, Mescaline, Peyote, Psilocybin, DMT
<u>Inhalants</u>	Glue, Toluene, Gasoline
<u>Other</u>	<hr/>

HOW TAKEN

6. **IV, through the veins**
5. **Injection under the skin**
4. **Smoking, freebasing**
3. **Snorting, sniffing, breathing**
2. **By mouth: pills, drinking, chewing**
1. **Other methods**

CARD L3

fatigue or exhaustion

sweating

diarrhea

anxious

depressed

irritable

restless

trouble sleeping

tremors (hands tremble)

stomach ache

headache

weakness

nausea or vomiting

fits or seizures

muscle aches or cramps

runny eyes or nose

yawning

intense craving

seeing or hearing things that weren't really there

heart beating fast

change in appetite

fever

Appendix B: Impact of Events Scale (IES)

IMPACT OF EVENTS SCALE - Revised

ID:.....

Date:.....

Introduction: Below is a list of difficulties people sometimes have after exposure to stressful life events. Please read each item carefully, and then indicate how distressing each difficulty has been for you during the last seven days with respect to your feeling. Please circle an appropriate number indicating the level of difficulties you had or you are having at the moment.

	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Any reminder brought feelings about it.	0	1	2	3	4
2. I had trouble staying asleep.	0	1	2	3	4
3. Other things kept making me think about it.	0	1	2	3	4
4. I felt irritable and angry.	0	1	2	3	4
5. I avoided letting myself get upset when I thought about it or was reminded of it.	0	1	2	3	4
6. I thought about it when I didn't mean to.	0	1	2	3	4
7. I felt as if it hadn't happened or wasn't real.	0	1	2	3	4
8. I stayed away from reminders about it.	0	1	2	3	4
9. Picture about it popped into my mind.	0	1	2	3	4
10. I was jump and easily startled.	0	1	2	3	4
11. I tried not to think about it.	0	1	2	3	4
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	1	2	3	4
13. My feelings about it were kind of numb.	0	1	2	3	4
14. I found myself acting or feeling like I was at that time	0	1	2	3	4
15. I had trouble falling asleep.	0	1	2	3	4
16. I had waves of strong feeling about.	0	1	2	3	4
17. I tried to remove it from my memory.	0	1	2	3	4
18. I had trouble concentrating.	0	1	2	3	4
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or pounding heart.	0	1	2	3	4
20. I had dreams about it.	0	1	2	3	4
21. I felt watchful and on-guard.	0	1	2	3	4
22. I tried not to talk about it.	0	1	2	3	4

Appendix C: Alcohol Use Disorders Identification Test (AUDIT)

Appendix D: Indigenous Trauma Profile (ITP)

Trauma Profile of Indigenous Australians

ID:.....

DATE:.....

The following is a list of traumatic events those had occurred to Aboriginal people in the past. I would like to know if any of those events had happened to you. Please tick in the YES or NO column to indicate your response.

Experienced Event	YES	NO
1. You were taken away from your parents as a child and prevented from meeting them.		
2. Your sibling/s was/were removed or taken away by government.		
3. Learned/informed that one of your parents was taken away from his/her parents (your grand parents).		
4. Learned/informed that both of your parents were removed from their parents (your grand parents).		
5. Your child or children were taken away from you.		
6. Denied access to your child or children those who were taken away from you.		
7. Police brutality when being arrested.		
8. Assaulted by police in police cell.		
9. Threatened by police.		
10. Assaulted in police cell or prison by fellow detainees/prisoner		
11. Physically abused as a child		
12. Sexual abuse as a child		
13. Sexual assault/rape as an adult		
14. Subjected to domestic violence		
15. Threatened with weapon		
16. Threatened without weapon		
17. Injured from violence		
18. Injured from Motor Vehicle accident		
19. Tortured		
20. Kidnapped		
21. Witnessed someone badly injured		
22. Witnessed someone being attacked violently		
23. Witnessed domestic violence		
24. Witnessed someone suicide or attempt suicide		
25. Found a dead body		
26. Learned or informed someone close to you died violently		
27. Learned or informed that your parents or grandparents or great grandparents were mistreated or subjected to brutality of the authority (police, army, government official, prison officer, other government agents) of the time		
28. Learned or informed of destruction of Aboriginal culture		
29. Learned or informed that Aboriginal people have been dispossessed of their land.		
30. Learned or informed that your siblings were mistreated or subjected to the brutality of authority of the time		
31. Subjected to relentless discrimination/racism		
32. Any other distressing or frightening experiences. Please give list of those events:		
33. Please indicate the top three of above listed (including those you have listed in question 32) events you keep remembering or are troubling your thoughts.		

Appendix E: Study Information



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The Queen Elizabeth Hospital
28 Woodville Road
WOODVILLE SOUTH SA 5011

Professor Alexander C. McFarlane
Head of Department
MB,BS(Hons), MD, Dip.Psychother., FRANZCP

E-mail:

Information sheet on Research Study
Of
The relationship between exposure to traumatic Stress
and alcohol use in Aboriginal community of Western Australia

My name is Gelaye Nadew. I am studying towards the Degree of Doctor of Philosophy in the faculty of medicine at Adelaide University. As part of this program, I am investigating the relation between exposure to traumatic stress and alcohol use.

You are invited to participate in this study. The research is approved by the Adelaide University Human Research Ethics Committee and the West Australian Aboriginal Health Information and Ethics Committee. Most importantly, permission has been obtained from your community to conduct this research. The aim of this research is to examine whether exposure to traumatic events is likely to increase alcohol abuse and *vis-versa*. The process of this study involves meeting people and asking questions about their experience. By answering questions, you would provide me with information about your life experience including current social life style. The questions are three pages and require ticking appropriate boxes. In addition to this, my colleague or I will talk to you while entering information in computer at the same time.

To ensure that you understand the questions, health workers or myself will be with you in a quiet environment and help you complete the questionnaires. Following completion of the interview, I encourage you to attend the post-interview session. This is to help you handle any feelings related to remembering some of your past experiences. Health workers or myself will be available to discuss with you any concerns or feelings in relation to this study. If you don't want to do the post-interview session immediately after the interview, my colleague or myself will be available by calling us on the telephone number provided below. Telephone discussion will be provided, or a face to face meeting will be arranged.

I will ensure the confidentiality of the information you provide in the interview. To ensure that confidentiality is maintained, the questionnaire will not require your name and any information that may lead to personal identification. To contact individual/s for possible follow-up study or to update on any missing data, the participants' name will be listed on a separate piece of paper. This will be kept apart from the completed questionnaire so that the content of each individual response remains anonymous.

The information you provide will not be used for any other study without permission from your organisation or community. Findings of the study will not be published or presented in any media outlet without your permission. The report of the study will not contain the participant's name or any identifying information or the name of the community. This restriction is put in place in order to protect confidential information related to individuals as well as the communities.

This study is not connected to your local health service and not aimed at giving you any form of diagnosis or treatment. Participation in the study is voluntary and your right is preserved to withdraw from the interview or omit any question that you may feel uncomfortable to answer. In agreeing that you are participating in the study voluntarily and understand your rights, please sign the attached consent form prior to commencing the interview. For any further information about this study and post-interview session, please do not hesitate to contact me on 0418 965 090. Thank you very much for your time and cooperation.

Mr Gelaye Nadew

20.7.03

Prof Alexander C. McFarlane
Mr Brian D Tuckfield

Dr Geoff D Schrader
Dr Clara L Bookless

Dr Cherrie A Galletty
Dr Nicholas LS Potts

Appendix F: Letters to community organisations and leaders



ADELAIDE
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Department of Psychiatry
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The Queen Elizabeth Hospital
28 Woodville Road
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Professor Alexander C. McFarlane
Head of Department
MB,BS(Hons), MD, Dip.Psychother., FRANZCP

TELEPHONE :
FACSIMILE :

E-mail :

20 June, 2003

Dear Community Leaders, Aboriginal Health Workers and Participants,

This letter is to introduce Mr Gelaye Nadew, a student completing the Degree of Doctor of Philosophy in the faculty of medicine at Adelaide University. Mr Nadew is investigating the relationship between exposure to traumatic stress and alcohol use in Aboriginal Community. The West Australian Aboriginal Health Information and Ethics Committee (WAAHIEC) and the Adelaide University Human Research and Ethics Committee have approved the study.

The aim of this research is to examine whether exposure to traumatic events is likely to increase alcohol abuse and vis-versa. The findings will help in understanding the relationship between exposure to traumatic events and alcohol abuse and prevalence of Posttraumatic Stress Disorder. It will help in developing service to treat and manage PTSD, alcohol abuse and other related disorder.

The process of this study involves meeting people and asking questions about their experience. There are three pages of short questions requiring ticking appropriate boxes circling numbers. In addition to those, Mr Nadew will talk to the participants, asking questions from Composite International Diagnostic Interview (CIDI) installed in the laptop computer. By answering questions, you would provide Mr Nadew with information about your life experience including current social life style. To ensure that you understood the questions, Mr Nadew and his colleague will be with you in a quiet environment and help you complete the questionnaires. I encourage you to attend the post-interview session on completion of the questionnaire and the interview. This is to help you handle any feelings related to remembering some of your past experience. Mr Nadew will be available to discuss with you any concern or feelings generated as a result of remembering your past experience. If you don't feel doing the post-interview session immediately after the interview, the health you can arrange an alternative time by calling the telephone number provided below.

Mr Nadew will ensure the confidentiality of information you provide in the interview. To ensure that confidentiality is maintained, the questionnaire will not require your name and any information that may lead to personal identification. To contact individual/s for possible follow-up study or to update on any missing data, the participants' name will be listed in a separate piece of paper. This will be kept apart from the completed questionnaire so that the content of individual response remains anonymous.

The information you provide will not be used for any other study without permission from your organisation or community. Findings of the study will not be published or presented in any media outlet without your permission. The report of the study will not contain the participant's name or any identifying information and the name of the community. This restriction is put in place in order to protect confidential of individuals as well as the community.

Participation in this study is voluntary and participants are free to withdraw at any time without prior notice or omit any particular question that he/she feel uncomfortable to answer. Should you require further information about this study, please do not hesitate to contact me on 08 8222 6515.

Professor Alexander McFarlane
Head, Department of Psychiatry
Faculty of Medicine
Adelaide University

Date:

Dear,

As discussed on the phone late afternoon today, this is a detailed account of the proposed study. I am a doctoral student in the faculty of medicine at Adelaide University, investigating the relationship between exposure to traumatic stress, Posttraumatic Stress Disorder and alcohol abuse. The target population for this study includes xxxxxxxxxxx xxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxx and surrounding communities and Wiluna. Approval is being sought from The Western Australian Aboriginal Health Information and Ethics Committee (WAAHIEC) and the Research Ethics Committee of the Adelaide University.

The aim of this research is to examine whether exposure to traumatic events is likely to increase alcohol abuse and vis-versa. The process of this study involves meeting people and asking questions about their experience. By answering questions, participants will provide me with information about their life experience including current social life style. The questions are in a written format and may take up to an hour to an hour and half. To ensure that they understand the questions, health workers or myself will be with the individual participant in a private environment and help him/her to complete the questionnaires. Following completion of the interview, participants are encouraged to attend the post-interview session. This is to help the participant to handle any feelings related to remembering some of his/her past experiences. Health workers or myself will be available to discuss with the participant any concerns or feelings in relation to this study. If they don't feel like doing the post-interview session immediately after the interview, the health workers or myself will be available by telephone. The participants have the choice of discussing their concerns on the telephone or we will arrange a face to face meeting. For a face to face meeting, I arrange appointment in the place and time convenient to the participant.

The findings will help in understanding the relationship between exposure to traumatic events and alcohol abuse, and in determining the prevalence of Post-Traumatic Stress Disorder. It is particularly important in understanding the influence of past experience on Aboriginal people's health and well being. Most importantly, the information gathered will help in developing service to treat and manage PTSD and alcohol abuse.

I will keep totally confidential all information received from participants. To ensure that confidentiality is maintained, the questionnaire will not require the participant's name or any other information that may lead to personal identification. To contact individuals for possible follow-up study or to update any missing data, the participants' names will be listed on a separate piece of paper. This will be kept apart from the completed questionnaire so that the content of the individual response remains anonymous. The name of the community in which the participant resides is also not required. This restriction is put in place in order to protect confidentiality of individuals, as well as of the community. The subsequent thesis will also not contain any information that may lead to the identification of particular participants or their community. During the interview, each participant's right is preserved to withdraw from participating in the study at any time without prior notice.

In order to obtain the relevant ethics committee approval, which is being sought, and to proceed with the study, I need to be sure that the community and leaders such as yourself see the planned research as being appropriate and that it has your approval. The proposal of this study will be tabled in the WAAHIEC session scheduled for June

2002. Your approval is important and one of essential requirements for this study to go a head. Please send your response to Gelaye Nadew,
6932. Your prompt response is appreciated. If you would like any further information, I am contactable on _____ or e-mail to:

Sincerely yours

Gelaye Nadew

Date:

Dear

As per telephone conversation some 2-3 weeks ago, I am writing to seek GRAMS support for my research project. I am a doctoral student in the faculty of medicine, in department of psychiatry at the University of Adelaide, investigating the relationship between exposure to traumatic events, Posttraumatic Stress Disorder and alcohol use. Aboriginal communities of xxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx have been selected as the main study population. The aim of this research is to examine whether exposure to traumatic events is likely to increase alcohol abuse and in return alcohol abuse results in further traumatisation.

The process of this study involves meeting people and asking questions about their experience: By answering questions, participants will provide me with information about their life experience including current social life style. The questions are in a written format and may take up to an hour to an hour and half. To ensure that they understand the questions, health workers or myself will be with the individual participant in a private environment and help him/her to complete the questionnaires. Following completion of the interview, participants are encouraged to attend the post-interview session. This is to help the participant to handle any feelings related to remembering some of his/her past experiences. Health workers or myself will be available to discuss with the participant any concerns or feelings in relation to this study. If they don't feel like doing the post-interview session immediately after the interview, the health workers or myself will be available by telephone. The participants have the choice of discussing their concerns on the telephone or we will arrange a face to face meeting. For a face to face meeting, I arrange appointment in the place and time convenient to the participant.

The findings will help in understanding the relationship between exposure to traumatic events and alcohol abuse, and in determining the prevalence of Post-Traumatic Stress Disorder. It is particularly important in understanding the influence of past experience on Aboriginal people's health and wellbeing. Most importantly, the information gathered will help in developing service to treat and manage PTSD and alcohol abuse.

I will keep totally confidential all information received from participants. To ensure that confidentiality is maintained, the questionnaire will not require the participant's name or any other information that may lead to personal identification. To contact individuals for possible follow-up study or to update any missing data, the participants' names will be listed on a separate piece of paper. This will be kept apart from the completed questionnaire so that the content of the individual response remains anonymous. The name of the community in which the participant resides is also not required. This restriction is put in place in order to protect confidentiality of individuals, as well as of the community. The subsequent thesis will also not contain any information that may lead to the identification of particular participants or their community. During the interview, each participant's right is preserved to withdraw from participating in the study at any time without prior notice.

In order to obtain the relevant ethics committee approval, which is being sought, and to proceed with the study, I have consulted with communities and have obtained support from local organisations in Mount Magnet, Cue and Meekatharra. I have also obtained support from GRAMS outreach representative to Murchison, Mr Des Thomson. Those documents can be made available to you if require. Having obtained the communities support, I am seeking your support on behalf of GRAMS and Aboriginal

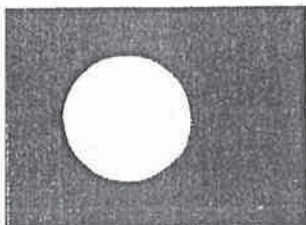
people of the region as final step to present the project to WAAHIEC for ethical clearance.

Your approval is important and essential requirement for this study to go a head. I have enclosed the sample of the questionnaire for your information. Please send your response to Gelaye Nadew, Your prompt response is appreciated. If you would like any further information, I can be contacted on or e-mail to: or

Sincerely yours

Gelaye Nadew

Appendix G: Approval letters from community organisations and leaders



Geraldton Regional Aboriginal Medical Service

P.O. BOX 1689 W.A. 6531

CLINIC: 21 5588
FAX: 64 3225
ADMIN: 64 4840
ADMIN FAX: 21 8584

To
Galaye Nadew (Doctoral Student)

From
Des Thompson (Senior Aboriginal Health Worker)
GRAMS Meekatharra Outreach Service

Planned study Support Letter

Dear Galaye,

In reply to your letter asking for the community, and myself as the Senior Health Worker in the region to support you in your study, Exposure to traumatic experience and Relationship and Alcohol Abuse.

I am sure that the community and myself see the research as being appropriate and valuable and we would certainly approve of this planned research which would benefit all Communities throughout the region.

Should you need further information please contact me on (08) 9981 1005

Des Thompson
31st May 2002

STEEL FABRICATIONS
TRAILERS
SHEEP FEEDERS
FIREWOOD
LAWNS CUT
SAND CARTED
WELDING
GENERAL LABOURING



848 Marmont St, Meekatharra 6642
P O Box 107, Meekatharra WA 6642
PHONE: 099 801 339 FAX: 099 801 341

CONCRETE PRODUCTS
INDUSTRIAL PAINTING
GARDENING
LOADER & BACKHOE HIRE
WITH OPERATOR
BOBCAT & TRUCK HIRE
DEMOLITIONS

Gelaye Nadew
Doctoral Student
Faculty of Medicine
Department of Psychiatry
PO Box 560
Inglewood WA 6932

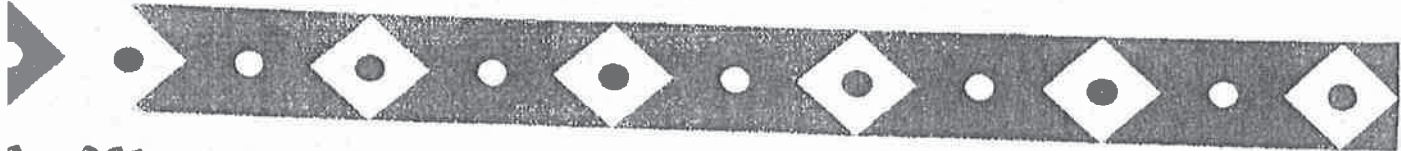
Dear Gelaye,

I have received your letter dated 7th May 2002 in which you state that you wishing to research the relationship between exposure to traumatic stress and alcohol use in the Meekatharra district.

Yulella Fabrications Aboriginal Corporation gives you our permission to carry out your research.

Yours sincerely,

Darryl Curley
Manager
Yulella Fabrications Aboriginal Corporation
22nd May 2002



**Mt Magnet Aboriginal
Progress Association**

**PO Box 426
Mt Magnet WA 6638**

Phone: 9963 4144

Fax: 9963 4344

Email:

16th May, 2002.

Gelaye Nadew
Doctoral Student
Adelaide University

Dear Gelaye,

Having read the documents relating to your proposed study: "Incidents of traumatic stress and it's relationship to alcohol use in Aboriginal community of Western Australia: I think the study have potential in giving better understanding of various issues affecting the health and well-being of Aboriginal peoples' life

Therefore I give my full support on behalf of the Mt Magnet Aboriginal Progress Association. Should you have any query, please contact me on the above number.

Yours truly,

Joan Walsh
A/Chairperson
Mt Magnet Aboriginal Progress Association.

Gelaye Nadew

Dear Gelaye,

**Re: Letter dated 21/11/2001 - Questionnaire package for P.T.S.D
and Alcohol Abuse.**

I would like to advise you that I strongly approve of the Questionnaire above, as this will give more insight into problems and Social Issues that affect day to day lives of Aboriginal People.

Yours sincerely

Phillip Curley
ATSIC Rep.
30/11/2001

27 May 2002

Gelaye Nadew
Doctoral Student
Adelaide University

Dear Gelaye

Having read the documents relating to your proposed study incidents of traumatic stress and its relationship to alcohol use in Aboriginal community of Western Australia, I think the study have potential in giving better understanding of various issues affecting the health and well being of Aboriginal peoples life.

Therefore, I give my full support on behalf of the Cue Aboriginal Community. Should you have any queries, please contact me on 9963 1053 or 9963 1539.

To go ahead with this.

Yours truly,

Valerie Williams
Aboriginal Health Worker
Cue Health Centre
PO Box 7
CUE WA 6640

Appendix H: Consent Form



Department of Psychiatry
 Faculty of Health Sciences
 The Queen Elizabeth Hospital
 28 Woodville Road
 WOODVILLE SOUTH SA 5011

Professor Alexander C. McFarlane
 Head of Department
 MB,BS(Hons), MD, Dip.Psychother., FRANZCP

TELEPHONE : +61 8 8222 6515
 FACSIMILE : +61 8 8222 6036
 E-mail: alexander.mcfarlane@adelaide.edu.au

**STANDARD CONSENT FORM
 FOR PEOPLE WHO ARE SUBJECT IN A RESEARCH PROJECT**

1. I,(please print name) consent to take part in the research project titled: **“The relationship between exposure to traumatic stress and alcohol use in Aboriginal Community of Western Australia.”**
2. I acknowledge that I have read the attached information sheet on the research study into the relationship between exposure to traumatic stress and alcohol use in Aboriginal community of Western Australia.
3. I have had the project, so far as it affects me, fully explained to my satisfaction by researcher or research worker. My consent is given freely.
4. Although I understand that the purpose of this research project is to improve the quality of medical care, it has also been explained that my involvement may not be of any benefit to me.
5. I have been informed that, while information gained during the study may be published, I will not be identified and my personal information will not be divulged. It has also been explained to me that the findings of the study will be presented to community, in which I would have the opportunity to be present.
6. I understand that I am free to withdraw from the project at any time and that this will not affect medical advice in the management of my health, now or in the future.
7. I am aware that I should retain a copy of this consent form, when completed, and the attached information.

...../...../.....
 (Signature) (Date)

RESEARCHER/RESEARCH ASSISTANT

I have described to(Name of subject) the nature of the proposed study to be carried out. In my opinion she/he understand the explanation.

Status in Project:

Name:.....

Signature:.....Date:/...../.....

Prof Alexander C. McFarlane
 Mr Brian D Tuckfield
 Dr Geoff D Schrader
 Dr Clara L Bookless
 Dr Cherrie A Galletly
 Dr Nicholas LS Potts

Appendix I: Ethical clearance

**WESTERN AUSTRALIAN ABORIGINAL HEALTH
INFORMATION AND ETHICS COMMITTEE**

(57-10/01nadew – october02)
Telephone: (08) 9222 2403
Peta.wootton@health.wa.gov.au

Gelaye Nadew

Dear Mr Nadew

**INCIDENTS OF TRAUMATIC STRESS AND ITS RELATIONSHIP TO ALCOHOL USE IN
REMOTE ABORIGINAL COMMUNITIES OF WESTERN AUSTRALIA
(WAAHIEC reference 57-10/01)**

The Western Australian Aboriginal Health Information and Ethics Committee (WAAHIEC) met on 4th October 2002. At this time the additional information and revised pro forma you provided, in relation to the above research proposal, was discussed. The endorsement of Geraldton Aboriginal Medical Service was also noted which was compliant with the WAAHIEC request (correspondence dated 5th April 2002).

The WAAHIEC is pleased, therefore, to approve the research. Please note that approval for studies is for three years and the research should be commenced and completed within that period of time. If, as you have indicated, the project will be four years in duration you are required to resubmit for an extension by October 2005.

Additionally, in accordance with the NHMRC *National Statement on Ethical Conduct in Research Involving Humans*, WAAHIEC is charged with the responsibility of keeping the progress of all approved research under surveillance. As a prerequisite of approval WAAHIEC requests a progress report be sent every six months giving an update on the project and at the completion of the research (which is noted as 2005) and before any publications are released. I enclose a research monitoring form to help you with this.

The Office of Aboriginal Health Secretariat will be pleased to assist you should you have any queries regarding completion of the research monitoring form or any other matter raised in this letter.

Yours sincerely

PP Ted Wilkes
Chairperson
WA Aboriginal Health Information and Ethics Committee

18 October 2002

Encl: Monitoring form

*Peta Wootton, Department of Health,
Office of Aboriginal Health, 189 Royal Street, East Perth, WA 6004;
or PO Box 8172, Stirling Street, Perth, WA 6849
Tel: (08) 92222403 Fax: (08) 92224378 e-mail: peta.wootton@health.wa.gov.au*



OFFICE OF THE DEPUTY VICE-CHANCELLOR (RESEARCH)

HELEN MALBY
SECRETARY
HUMAN RESEARCH ETHICS COMMITTEE
THE UNIVERSITY OF ADELAIDE
SA 5005
AUSTRALIA
TELEPHONE +61 8 8303 4014
FACSIMILE +61 8 8303 3417
email: helen.malby@adelaide.edu.au
CRICOS Provider Number 00123M

1 May 2003

Professor AC McFarlane
Psychiatry, QEH

Dear Professor McFarlane

PROJECT NO: *The relationship between alcohol abuse and traumatic stress in an Aboriginal community of Western Australia*
H-58-2001

Thank you for your report on the above project. I write to advise you that I have endorsed renewal of ethical approval for the study on behalf of the Human Research Ethics Committee on the basis that copies of the amended participant information material and the support letter from the community will be provided for our records.


~~The expiry date for this project is: 30 April 2004~~

Where possible, subjects taking part in the study should be given a copy of the Information Sheet and the signed Consent Form to retain.

Please note that any changes to the project which might affect its continued ethical acceptability will invalidate the project's approval. In such cases an amended protocol must be submitted to the Committee for further approval. It is a condition of approval that you immediately report anything which might warrant review of ethical approval including (a) serious or unexpected adverse effects on participants (b) proposed changes in the protocol; and (c) unforeseen events that might affect continued ethical acceptability of the project. It is also a condition of approval that you inform the Committee, giving reasons, if the project is discontinued before the expected date of completion.

A standard annual renewal and progress report form is available from the Committee's website. Please submit this prior to the above expiry date.

Yours sincerely

 **CE MORTENSEN**
Convenor
Human Research Ethics Committee