

Bachelor of Social Work

4th Year Research Project

“Bridging the Gap”

The Impact of Sexual Assault on Oral Health & Dental Experiences

Allison Payet

Design and Social Context

School of Global Studies, Social Science and Planning

RMIT University

October, 2007

ACKNOWLEDGEMENTS

The success of this research project would not be granted without the responses from victim/survivors of sexual assault who kindly participated from Australia, United States and Canada. They have provided insight and recommendations for strategies that may help to give them and other victim/survivors more security and safety in their future dental experiences.

Dental professionals must also be acknowledged for their participation and time in completing the 'Dental Professionals Awareness' Survey. They have provided informative responses which have influenced the projects recommendations and indicated a strong need for more information and increased support in working with victim/survivors in a dental setting.

I would like to take this opportunity to thank SECASA for fostering my passion for this issue and providing me the opportunity to conduct the research as part of my final year social work placement. I would like to particularly acknowledge my supervisor, Katrina O'Donnell, who has provided support, inspiring ideas to overcome challenges and constructive feedback as my 'editing eye'. Many thanks to manager, Carolyn Worth and SECASA counsellor/advocates for their much valued support, input, encouragement and advice for all things project related!! Also, thanks to SECASA and CASA counsellor/advocates who provided anecdotal evidence for the project which further reinforced the trauma experienced by some victim/survivors. Thank you to Miles and Juliet from Young Earth Web Design for their assistance with developing and uploading the information and surveys onto the SECASA website.

A number of organisations must also be acknowledged for their support; Dental Hygienists Association Australia- Victorian Branch (DHAAVB), Australian Centre for the Study of Sexual Assault (ACSSA) and Sexual Assault Resource Centre (SARC). DHAAVB has supported the challenges this issue presents for dental practitioners and wholeheartedly supported the need for the project; thank you for your generosity. Much thanks to ACSSA for kindly highlighting and supporting the research project on their website (www.aifs.gov.au/acssa) and assisting with literature searches. Thank you to SARC in Western Australia, for aiding with consciousness raising within their community.

A big thank you to Christine Craik, lecturer and field placement liaison officer, who has provided me with valuable support, advice and editing feedback.

The email support and advice from many professionals across Australia and overseas must be acknowledged. Your thoughts, encouragements and well wishes for the research have provided both inspiration and motivation throughout the project.

CONTENTS

PART	TITLE	PAGE
1	INTRODUCTION	
	Project Background	5
	Project Rationale	8
	Project Development & Methodology	8
	Language and terminology	11
	Acronyms	18
	Prevalence of Sexual Assault	18
2	VICTIM/SURVIVORS EXPERIENCES	
	The circumstances of sexual assault	22
	Dental attendance	24
	The impact of sexual assault on dental experiences	25
	Factors inhibiting dental care & treatment	26
	Oral health issues	28
	Experiences of dental health care and treatment	30
	Disclosing sexual assault to dental professionals	33
	Feeling safe- Recommendations	34
	Significant Health Issues	41
3	LITERATURE REVIEW	42
4	REPORT ON THE RESEARCH	
	Findings	61

Themes	71
Conclusions	74
Limitations	78
Recommendations	80
Bibliography	85

5

APPENDICES

1. Victim/Survivors Survey	91
2. Awareness leaflet	93
3. Dental Professionals Survey	94
4. Counsellor/advocate questionnaire	96
5. Email Evidence	97
6. Cognitive Vulnerability Model	99

PART ONE

INTRODUCTION

This research study is a compilation of the responses from 95 participants using phone, email, written and online surveys conducted over a period of 3 months from July to September, 2007. It explores the experiences of adult female and male victim/survivors of sexual assault when accessing and receiving dental treatment and the awareness of dental professionals around the prevalence of sexual assault and the impact that sexual assault can have on victim/survivors dental experiences.

The potential benefits of this study are widespread including increased dental attendance, oral health status and general wellbeing for victim/survivors. Prospective advantages exist for dental professionals in such that happier clients with more positive dental experiences can increase the rate of return, maintain appointments and sustain life long clientele, ultimately enhancing economic return. Although there are discernable oral health issues for children who are victims of CSA and patients of dental clinics, this research study only explores the issues and impacts for adult victim/survivors in a dental context.

Project Background

The impact of sexual assault experiences on the oral health of adults has not been a priority in the Australian context of dental health care. Due to the re-allocation of funding for oral health care services in Australia, changes in Commonwealth subsidies have resulted in a major shift moving away from public dental services to private health insurance practice. Thus, the main contention debated in both the public and political arenas has focused predominantly on the issue of access to oral health care services for the low income and disadvantaged who are forced to access dental treatment through dental clinics located within community health care centres, hospitals and school dental clinics (Victorian Government Health Information, 2007). As a result, 650 000 people are awaiting public dental treatment across Australia (Masters, 2007) with waiting lists in Victoria blowing out to an all time high, forcing

approximately 200,000 Victorians (Masters, 2007) to currently await treatment for anywhere between as long as 2 to 5 years or more (Masters, 2007) (ABC News, 2007).

Socio-economic costs factors are a significant predictor to how often people attend dental care and treatment and whether they attend private or public providers (Harford, Ellershaw & Stewart, 2004). A recent survey by ACOSS found that nearly half the Australians questioned believed that they couldn't afford basic dental treatment (ABC News, 2007). The Australian Research Council for Population Oral Health conducted a National Telephone Interview Survey in 2002 which concluded that adults in the lowest income category "were more likely to have not visited a dentist in the last five years than adults in the highest income category" (cited in Harford, Ellershaw & Stewart, 2004, pg. 206). In terms of the impact of costs in deciding to seek dental treatment from public or private providers, "the percentage of adults visiting a private provider increased with income" (Harford, Ellershaw & Stewart, 2004, pg. 207), and those in lower income brackets much more likely to see a public provider (Harford, Ellershaw & Stewart, 2004).

Due to the Federal Government commissioned shift from public to private dental services, the oral health of Australians on lower income brackets has been significantly affected, substantially limiting oral health improvements for Australians (Harford, Ellershaw & Stewart, 2004). Due to high costs associated with accessing dental treatment, a study conducted by the Australian Consumers Association found that "30% of adults avoided dental care because of cost, one quarter had untreated tooth decay and more than 20% had moderate to severe gum disease" (Masters, 2007, pg 1-2). Similarly, research conducted by Armfield, Spencer & Stewart (2006) concluded that those people coming from a lower socio-economic background do have poorer dental health (Armfield, Spencer & Stewart, 2006) turning largely "preventable dental decay...into chronic life-threatening illness" (Masters, 2007).

In the context of this study it is imperative to consider the present dental workforce in Victoria, both to gain an understanding of the numbers of dental professionals currently practising and to understand what the possible gender implications might represent for victim/survivors accessing treatment. Table 1 illustrates the current

landscape of dental professionals in Victoria, demonstrating a comparative gender analysis across the different groups of dental professionals included in this research study.

Table 1. Registered and Practising Victorian Dental Professionals (July, 2007)

Dental Occupation	Gender			
	Male	%	Female	%
Dentist	1597	85	881	67
Dental Hygienist	3	0.2	146	11
Dental Therapist	7	0.4	213	16
Duly trained Dental Hygienist/Therapist	5	0.3	54	4
Dental Prosthetists	267	14	27	2
Total	1879		1321	

In summary, the DPBV (17/07/07) claims that as of July 2007, approximately 41% of registered practising dentists were female with significantly higher numbers of female than male dental professionals employed in dental therapy and hygiene. In regards to gender issues in dentistry, it has been claimed that although “men have dominated the profession (AHMAC, 2001, pg. 52)”, feminisation is occurring with women predicted to equal one quarter of all Australian dentists by 2011 (AHMAC, 2001). Examining the figures in Table 1, it is evident that female dentists constitute 55% of all dentists in Victoria, well above the projected one quarter throughout Australia in four years.

The current political implications for oral health care are factors that influence access to dental services for many within the community and will be referred to at various sections in this research report. The central point however; will be to explore the impact of sexual assault on victim/survivors access dental health care services and their experiences of receiving dental treatment.

Project Rationale

In spite of the greater acknowledgement of the impacts of sexual assault on accessing medical treatment (eg. Pap smears, pregnancy, mental health) within the health care setting, resulting in improvements for victim/survivors, there is a notable lack of awareness and information in Australia examining the impacts of sexual assault on oral health care. This has contributed to poorer oral health outcomes and status for victim/survivors and a largely unknown void for dental professionals. Consequently, this lack of awareness and information has negated the voices and experiences of both female and male survivors who have difficulty with oral health care and receiving dental treatment. This concern has formed the rationale behind the development of this research project which has also aimed to understand the level of awareness around these issues in the dental industry and the potential apprehensions of dental professionals who may be working with patients who are victim/survivors.

Project Development & Methodology

Using this rationale as a foundation for the research project has been instrumental in its development and incorporating both quantitative and qualitative methods. Using these methods collaboratively has allowed for a deeper understanding of subjective experience and aimed to satisfy both the statistical requirements for evidence based research and the researcher's own commitment to feminist based research values. In this sense the researcher's own positioning is involved in the research process as both informant and investigator becoming 'the outsider within' (Riessman, 1994).

In the context of this study, feminist based research principles have facilitated a more equal power relationship viewing those contributing to the research as 'participants' rather than 'subjects', while also valuing both the originality and authenticity of participants responses. As the project is informed by a feminist based perspective, it recognises that participants are the authorities and experts in both their own lives and their experiences with dental care and treatment while also seeking to value the differences between these experiences for different persons.

As feminist based research is synonymous with working towards societal change and action, another focus of this study is to facilitate change for victim/survivors in their dental experiences and treatment, while also empowering them with support and

strategies in achieving goals that may lead to better oral health status. Two action based outcomes informed by the research will be developed; a dental professional's booklet and a victim/survivors resource pamphlet. The dental professional's booklet aims to create more awareness within the dental industry around the issues that these patients may face while supporting recommendations for ways of working with victim/survivors which are indicative of best practice. The victim/survivors resource pamphlet will endeavour to consciousness raise around the issues while providing support and suggestions for other resources that may be helpful in empowering victim/survivors to take steps towards better oral health for their overall wellbeing.

Three formal methods of data collection were used in this research study; a victim/survivors survey, a dental professional's survey and an anecdotal evidence questionnaire for CASA counsellor/advocates. Additionally, telephone and email discussions provided a more informal method for data collection that was also useful in shaping outcomes, and thus will be incorporated. The following sections explore the aims, samples and procedures for each respective method.

Victim/Survivors Survey

The anonymous victim/survivors survey which was open for 8 weeks from July to September 2007, aimed to explore the impacts of sexual assault on dental experiences to gain a deeper understanding through examining trends and dissimilarities in both statistical information and personal experiences. Fourteen questions were included in the survey and centred on the following themes: demographics, circumstances of the sexual assault, dental attendance and inhibitors, gender preference (dental professional), oral health status, past dental experiences and suggestions for beneficial and positive dental participation which may assist feelings of safety (see Appendix 1). The inclusion criterion for each survey participant was a history of CSA or recent sexual assault.

The survey was drafted in consultation with SECASA counsellor/advocates and uploaded onto the SECASA website for participants to complete anonymously and submit via the internet. A research brief was posted under 'What's On' to raise awareness of the issue, highlight the study and direct interested participants to the survey. Leaflets were also designed to raise further awareness of the study and each

counsellor/advocate was given copies to display at their regional offices (see Appendix 2). Two participants who were clients at SECASA did not have access to the internet and expressed interest in the study, requesting a hard copy format which was printed off by a counsellor/advocate and completed anonymously and returned to the researcher in a self addressed envelope. Further attention was drawn to the research via a brief given at the beginning of the August CASA Forum meeting held at the Royal Children's Hospital, Melbourne, prompting an email send-out to each Victorian CASA branch manager.

In an attempt to further engage in consciousness-raising around the issue in question and the existence of a survey for victim/survivors, external agencies such as ACSSA, ASCA and SARC in Western Australia were contacted. They kindly supported the study via email alerts to members, uploading the research brief on their websites, providing telephone consultation, displaying leaflets at their offices and/or distributing them to members. This support has proved beneficial in raising awareness regarding the online survey, recruiting participants and providing motivation for extending the data collection time frame.

Dental Professionals Survey

The dental professional's survey, available on the SECASA website and in hard copy, aimed to assess the level of awareness around sexual assault impacts on oral health experiences. The sample group expectation was to be inclusive of all dental professionals not just dentists, as all may come in contact with victim/survivors in the dental setting. Unfortunately, due to research time limitations that were unable to meet the requirements of the governing body's processes, dentists were not able to be included as a larger sample in this study.

Survey questions were focused around four themes; awareness of sexual assault incidence within the community, understanding the impact of sexual assault on the oral health of adult survivors, the frequency and indications of victim/survivors as dental patients and lastly strategies to better equip dental professionals in working with victim/survivors (see Appendix 3).

Questionnaire: Anecdotal evidence from CASA counsellor/advocates

Due to time constraints and ethical issues, victim/survivors were unable to be interviewed face-to-face. In addition to using a victim/survivors survey as a catalyst for expression, CASA counsellor/advocates were also utilised to give voice to their client's oral health care experiences. A short questionnaire (see Appendix 4) was developed to facilitate this process and open space for counsellor/advocate's reflections and quotes from victim/survivors. Questions were kept to a minimum and emailed to workers in an attempt to decrease the amount of time required to complete the questionnaire (as it is appreciated that time is a limited resource for counsellor/advocates). It was hoped that keeping the questionnaire short and relatively easy to complete would encourage workers to be involved and thus increase the response rate.

Emails and telephone discussions

At the inception of the research project, the informal nature of emails and telephone discussions was not anticipated to be included as part of methodology. Due to the useful consultation that occurred via these methods and the importance of them in shaping the research, it will be included in this section as part of data collection (see Appendix 5).

Language and Terminology

The awareness surrounding sexual assault terminology has long been a topic of contention (CASA House, 1990) resulting in the extent of sexual assault in Australia being dependable on the data source and definition (Levore, 2003). It is important that definition around sexual assault and dental terminologies be established to provide a context for the language used in this research report. For the purpose of this report and to provide consistency, both CSA and adult sexual assault will be referred to interchangeably as sexual assault. Additionally, the term victim/survivor will be used to incorporate the wide experiences of men and women who lived through the experience of sexual assault. A full list of key terms and definitions used in this study is provided below:

- **Approach Behaviour**

Person is in a conflictual cycle as they want to achieve a goal but avoid the situation and thus are unable to achieve it (Kamin, 2006).

- **Anxiety**

“A feeling of dread or worry focused on, yet temporally prior to, exposure to a feared stimulus” (Armfield, Spencer & Stewart, 2006, pg. 78).

- **Childhood Sexual Abuse (CSA)**

Offence Based Definition

- Sexual penetration of a child under the age of 10
- Sexual penetration of a child between 10 and 16
- Indecent act with a child under the age of 16
- Sexual relationship with a child under the age of 16 who is under care, supervision or authority of the adult in the relationship.

(Victoria Legal Aid, 2004)

Experience Based Definition

- when a person uses power or authority over a child to involve the child in sexual activity and the child's parent or caregiver has not protected the child. Physical force is sometimes involved. Child sexual abuse involves a wide range of sexual activity. It includes fondling of the child's genitals, masturbation, oral sex, vaginal or anal penetration by a penis, finger or other object, or exposure of the child to pornography.

(Department of Human Services, 2007)

- **Dental Hygienist**

The role of a dental hygienist is to remove plaque, stain and calculus (tartar) from teeth and to teach patients how to maintain oral health. (DHA AVB, 2007)

- **Dental Periodontist**

A periodontist treats diseases of the gums and supporting tissues. (about.com, 2007)

- **Dental Prosthetist**

A dental prosthetist fits, constructs and provides a complete and professional denture care service.

- **Dental Therapist**

Dental therapists examine and treat dental diseases in pre-school, primary and secondary school children and work in collaboration with dentists. (ADTA, 2007)

- **Dissociation**

“Disruption in the usually integrated functions of consciousness, memory, identity, or perception. The disturbance may be sudden or gradual, transient or chronic (American Psychiatric Association, 2000, pg. 519)”. Dissociative experiences are characterised by compartmentalisation of consciousness, that is, certain mental events that would ordinarily be expected to be processed together (eg. Thoughts, emotions, motor activity, sensations, memories and sense of identity) are functionally isolated from one another and, in some cases, rendered inaccessible to consciousness and/or voluntary recall (Steinberg, 1994).

- **Fear**

“Individual’s emotional response to a perceived threat or danger:

1) An unpleasant cognitive state, such as feeling something terrible is going to happen

2) Physiologic changes (that) typically include tachycardia (abnormally rapid heartbeat), perspiration, respirations changes such as hyperventilation, muscle

tension, gastrointestinal upset, and other physiologic signs of emotional arousal.

3) Overt behavioural movements such as jitteriness, shaking, pacing, and attempts to escape.” (Milgrom, Weinstein & Getz (1995) cited in Kamin 2006)

- **Flashbacks**

The re-experiencing of disturbances in perception “causing significant distress or impairment in social, occupational or other important areas of functioning” (American Psychiatric Association, 2000, pg. 253-254) and can be triggered by stressors. Associated with Post Traumatic Stress Disorder where traumatic and highly sensory memories are replayed with or without explicit detail (Rothschild, 2000) with intense sensations “that the suffering individual is unable to distinguish the current reality from the past” (Rothschild, 2000, pg. 45).

- **Mandated professionals**

The following persons are mandatory reporters for the purposes of the *Children, Youth and Families Act 2005* (Victorian Government, 2005, pg. 115-6):

- A registered medical practitioner;
- A person registered under the *Nurses Act 1993*;
- A person who is registered as a teacher under the *Victorian Institute of Teaching Act 2001*;
- The head teacher or principal of a State school within the meaning of the *Education Act 1958*;
- A member of the police force
- The proprietor of, or a person with a post-secondary qualification in the care, education or minding of children who is employed by, a children’s service to which the *Children’s Services Act 1996* applies;

- A person with a post-secondary qualification in youth, social or welfare work who works in the health, education or community or welfare services field;
- A registered psychologist;
- A youth parole officer;

- **Panic Attacks**

“A discrete period of intense fear or discomfort, in which four (or more) of the following symptoms developed abruptly and reached a peak within 10 minutes:

- Palpitations, pounding heart, or accelerated heart rate
- Sweating
- Trembling or shaking
- Sensations of shortness of breath or smothering
- Feeling of choking
- Chest pain or discomfort
- Nausea or abdominal distress
- Feeling dizzy, unsteady, light-headed, or faint
- Derealisation (feelings of unreality) or depersonalisation (being detached from oneself)
- Fear of losing control or going crazy
- Fear of dying
- Paresthesias (numbness or tingling sensations)
- Chills or hot flushes”

(American Psychiatric Association, 2000, pg. 432)

- **Phobia**

“a form of intense fear and exposure to phobic stimulus almost invariably provokes an immediate anxiety response. Avoidance is of such degree that it causes significant distress.” (Milgrom, Weinstein & Getz (1995) cited in Kamin 2006).

- **Post-Traumatic Stress Disorder**

“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
2. the person’s response involved intense fear, helplessness, or horror.

The traumatic even is persistently re-experienced, there is persistent avoidance of stimuli associated with trauma and numbing of general responsiveness, persistent symptoms of increased arousal (not present before trauma), duration of the disturbance is more than one month and/or the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.”

(American Psychiatric Association, 2000, pg. 467-468).

- **Sexual assault**

Offence based definition:

Sexual assault is a physical assault of a sexual nature directed towards another person without their consent. The assault may range from unwanted touching to sexual penetration without consent, including attempts.

Sexual Penetration involves-

- The introduction, to any extent, of a person’s penis into the vagina, anus or mouth of another person; or
- The introduction, to any extent, of another part of a person’s body or an object into the vagina or anus of another person.

Consent requires ‘free agreement’ and a person cannot be said to freely agree where the person:

- Is fearful for themselves or for someone else;
- Has been threatened;
- Is mistaken about the identity of the person or the nature of the sexual act;
- Wrongly believes that the act is for medical purposes;
- Is incapable of consenting because of the influence of alcohol or other drug(s); or
- Is legally deemed incapable of giving consent because of youth, temporary or permanent incapacity, or where there is familial relationship or other relationship of trust.

Experience-Based Definition:

Sexual assault is unwanted behaviour of a sexual nature directed towards a person:

- Which makes that person feel uncomfortable, distressed, frightened or threatened, or which results in harm or injury to that person;
- To which that person has not freely agreed or given consent, or to which that person is not capable of giving consent;
- In which another person uses physical, emotional, psychological or verbal force or (other) coercive behaviour against that person.

Sexual assault may be located on a continuum of behaviours from sexual harassment to life-threatening rape. These behaviours may include lewdness, stalking, indecent assault, date rape, drug-assisted sexual assault, child sexual abuse, incest, exposure of a person to pornography, use of a person in pornography, and threats or attempts to sexually assault.

(ABS, 2004)

- **Vicarious Trauma**

“The inner transformation that occurs in the inner experience of the therapist (or other professional) that comes about as a result of empathic engagement with clients’ trauma material” (Pearlman & Saakvitne, 1995, pg. 31).

Workers can experience intrusive, avoidant or hyper-arousal reactions and “may involve a change in a person’s beliefs about themselves, the world, and other people within it (Morrison, 2007).

Acronyms

ABS	Australian Bureau of Statistics
ACOSS	Australian Council of Social Service
ACSSA	Australian Centre for the Study of Sexual Assault
AHMAC	Australian Health Ministers’ Advisory Council
AIHW	Australian Institute of Health & Welfare
ASCA	Advocates for Survivors of Child Abuse
CASA	Centre Against Sexual Assault
CSA	Childhood Sexual Assault
DHAA	Dental Hygienists Association Australia
DHAVB	Dental Hygienists Association Victorian Branch
DPBV	Dental Practice Board Victoria
IVAWS	International Violence Against Women Survey
PTSD	Post Traumatic Stress Disorder
SARC	Sexual Assault Resource Centre
SECASA	South Eastern Centre Against Sexual Assault

The Prevalence of Sexual Assault

Recent statistics illustrate that the incidence of sexual assault encompassing both childhood sexual abuse and recent sexual assaults within the community are intolerable. The growing occurrence of sexual abuse against children was reviewed in 1999 by Fergusson and Mullen who through their research concluded that

approximately 34% of girls (1 in 3), and 20% of boys (1 in 5) have been or will be sexually violated (Fergusson & Mullen, 1999). In more recent times, The International Violence Against Women Survey found that 34% of Australian women who participated, had experienced sexual violence by the age of 16 (IVAWS, 2004).

As many victims are unable to disclose and/or report sexual assaults to police for a multitude of reasons (IVAWS, 2004) (Personal Safety Survey, 2006) the true incidence is significantly underreported. “In 2005, there were an estimated 44,100 persons aged 18 years and over who were victims of at least one sexual assault in the 12 months prior to the survey; a victimisation prevalence rate of 0.3% (and) approximately 72,000 incidents of sexual assault were experienced by these victims” (ABS, 2005, pg. 7).

PART TWO

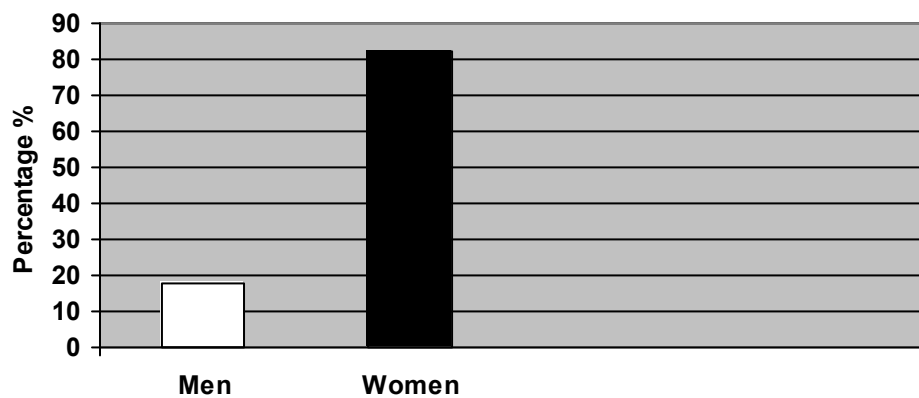
VICTIM/SURVIVORS EXPERIENCES

DEMOGRAPHICS

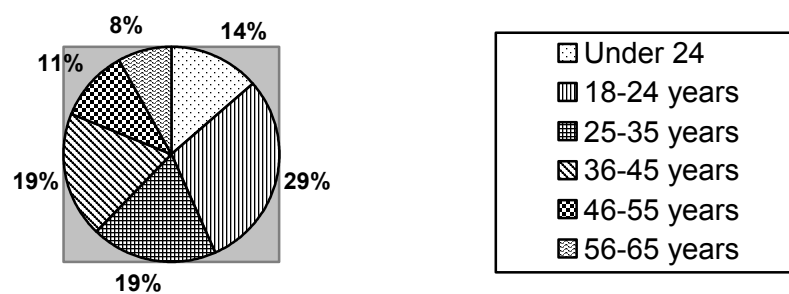
43 participants took part in the online anonymous victim/survivors survey.

82% of victim/survivors were female and 18% were male (see Graph 1). Participants were aged from 12-65 years of age (see Graph 2) and resided in Australia, United States of America and Canada (see Graph 3). Three participants declined to indicate a country of residence. In total, 21 participants who listed Australia as their country of residence specified that they were located in the State of Victoria.

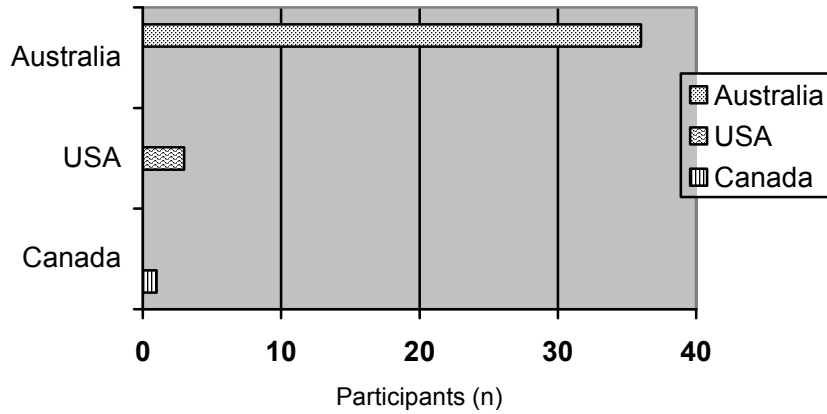
Graph 1. Gender of Participants



Graph 2. Age of Participants

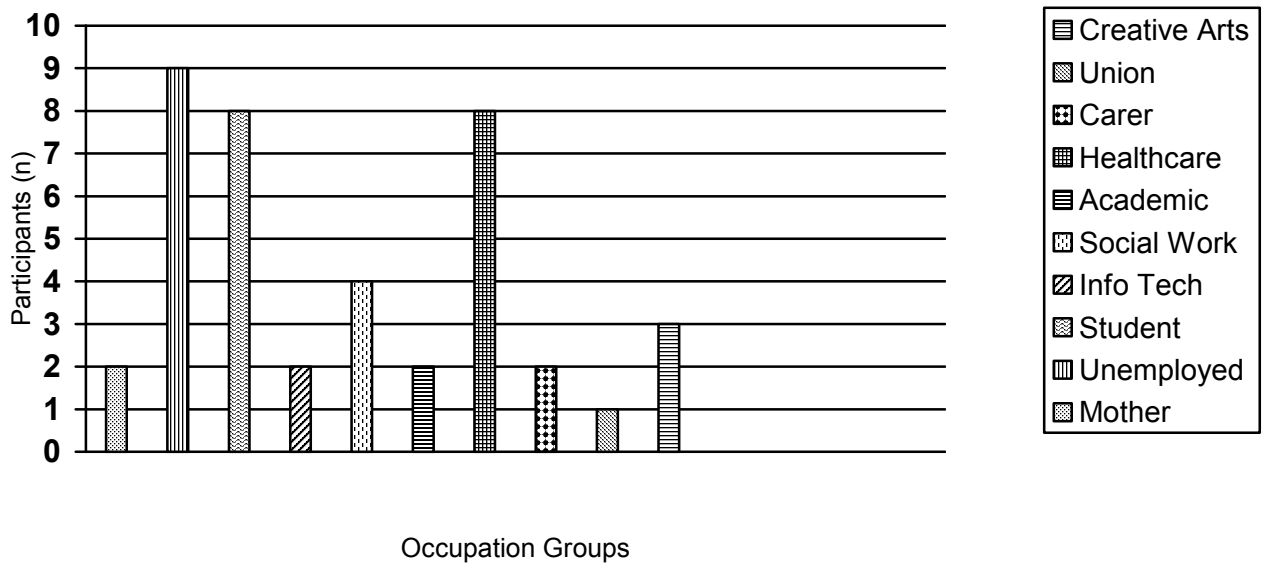


Graph 3. Country of residence



Understanding the influence of occupation as a variable of socio-economic status and possible inhibitor to accessing dental treatment were significant. All 43 participants responded to this question with the most common responses listed as ‘unemployed’ (21%), ‘student’ (19%) and ‘healthcare’ (19%) (see Graph 4). The implications for cost/financial factors as influences to dental health care access are moderate with total low income groups comprising 40% of the overall sample.

Graph 4. Occupation



THE CIRCUMSTANCES OF SEXUAL ASSAULT

Formulating questions around the circumstances of the sexual assault experienced by the participant was important to ascertain whether there was a predominance of either CSA or recent sexual assault. This section does not explore the nature of multiple incidences but rather examines the situation of the first sexual assault experienced by the participant.

Table 2 illustrates the varied age groups that were made available to participants for selection in addition to the results collated. The data collected indicates a high incidence of CSA amongst contributing victim/survivors. Age group '5-12 years old' indicated the most frequent response (58%) with no participants indicating a first experience of sexual assault in their adult years.

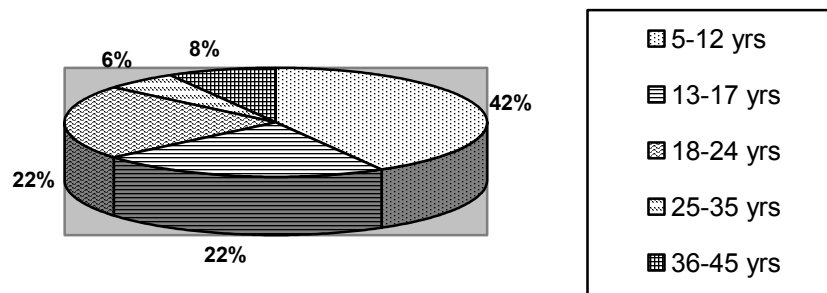
Table. 2 Age of participants at time of first assault

Age Groups	Frequency	Percentage (%)
5 - 12	25	58
13 - 17	11	26
18 - 24	0	0
25 - 35	0	0
36 - 45	0	0
46 - 55	0	0
56 - 65	0	0
66 - 75	0	0
	Total	36
		84

** please note: Discrepancy in figures due to 7 participants not indicating an answer for this question.*

In regards to disclosing sexual assault, a number of significant factors around age and outcome have been highlighted. 25 participants (71%) made disclosures and 10 (29%) did not disclose. Graph 5 displays the age of participants at time the disclosure was made.

Graph 5. Age of Disclosure



Although overwhelming numbers of disclosures were made by participants between 5-12 years of age, the outcomes for victim/survivors as a result of these disclosures was varied. Table 3 displays the variety of outcomes for participants who disclosed the sexual assault.

Table. 3 Outcomes for participants who disclosed sexual assault

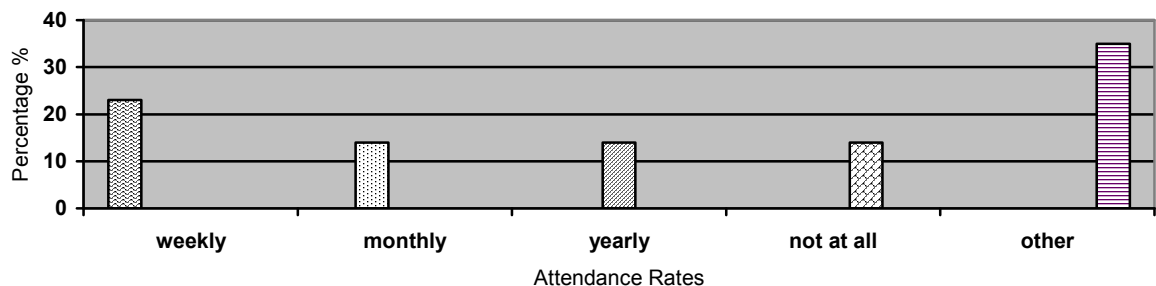
Outcomes of disclosure	
<ul style="list-style-type: none"> Disclosed to family (supported) 	<ul style="list-style-type: none"> - “supportive family who believed me.” - “family supportive” - “Told mum. Ended up telling dad. Was good about it.” - “I told when I was young but no one believed me- he was such a nice man. As an adult I got counselling and then told my family. This time they believed me.”
<ul style="list-style-type: none"> Disclosed to family (unsupported) 	<ul style="list-style-type: none"> - “I was the villain and my father was seen as the victim.” - “Absolutely nothing. They (family) never said another word about it.” “There was no outcome. My mum didn’t believe me.”
<ul style="list-style-type: none"> Counselling/Support Group 	<ul style="list-style-type: none"> - “I finally felt believed and supported through a support group.” - “counselling at SECASA” - “counselling, counselling and more counselling” - “started counselling at SECASA”
<ul style="list-style-type: none"> No action 	<ul style="list-style-type: none"> - “Nothing, I told a friend” - “Nothing...twice” - “Nothing...silence.”

<ul style="list-style-type: none"> • Not believed • Believed • Legal Action • Spoke to authority figure • Other 	<ul style="list-style-type: none"> - “Not believed” - “Called a liar” - “I was believed” - “Currently waiting for court trial.” - “Offender prosecuted- 2 years in jail.” - “Police came, arrested him. Now two years later...awaiting sentencing.” - “Reported to doctor, and police. No action.” - “Taken to a psychiatrist. I was blamed. I felt I was mad.” - “There was a lot of yelling and screaming. We moved not long after that.” - “Why didn’t you tell me before?”
--	--

DENTAL ATTENDANCE

Graph 6 illustrates how often participants attend the dentist; ‘weekly’, ‘monthly’, ‘yearly’, ‘not at all’ and ‘other’.

Graph 6. Dental Attendance Rates



Participants who indicated ‘other’ were asked to elaborate (if possible) on their dental attendance. Below is a list of their qualitative responses:

- “when required”

- “as needed”
- “4 times a year”
- “about every 10 years”
- “very rarely”
- “when I can afford it”
- “when teeth have collapsed, broken, tooth ache”
- “I have had full dentures since I was 14 years of age”
- “only when I am in bad pain”
- “only when I’m in agony”
- “I now have dentures, but before that I almost never when to the dentist”
- “I have only been once for an emergency wisdom tooth removal”

THE IMPACT OF SEXUAL ASSAULT ON DENTAL EXPERIENCES

67% of participants indicated that their experience of sexual assault had impacted on their willingness to seek dental treatment. Those victim/survivors gave the following examples of how sexual assault had impacted on their willingness to access dental health care and treatment:

- “increased anxiety, panic attacks. Not able to have long procedures done, especially anything that is fixed in the mouth like an impression or screw.”
- “too scared even with all my teeth problems. Now realise that I need to go but don’t know how to find a dentist who knows about sexual assault and how I feel.”
- “I choose not to go to the dentist because forcing my mouth open, and having instruments in my mouth, brings up gagging...memory of gagging when I was orally assaulted.”
- “Dentists as a child were male and this has had an impact.”
- “Increased amount of flashbacks post visit, and taste of metal and blood in mouth significantly disturbing.”
- “Having someone leaning over me and not being able to talk or be in control.”
- “I do not like the feelings of things in my mouth.”
- “embarrassed about my emotional reactions and gagging.”

- “It has impacted because I feel uncomfortable around male dentists due to the assaults, and yet primarily most dentists are male...male domination”
- “I feel like I’m being tied up...similar to assault.”
- “knowing that I have to lay in a chair for 15-20 minutes.”
- “Lying down, him over me, control, painful tools.”
- “I don’t trust being so close to someone I don’t know”
- “find it intrusive, having things in my mouth”
- “vulnerability-exposure, pain.”
- “when the dentist has instruments in your mouth, you have no voice.”

FACTORS INHIBITING DENTAL HEALTH CARE & TREATMENT

Similarly, victim/survivors listed a number of factors that inhibited them from receiving dental care in the past. Their responses reflected a number of major themes; fear, powerlessness & stress, financial constraints and waiting lists (see Diagram 1-3). Additional inhibitors included time, locality and transport.

Diagram 1. Fear as an inhibitor of dental treatment

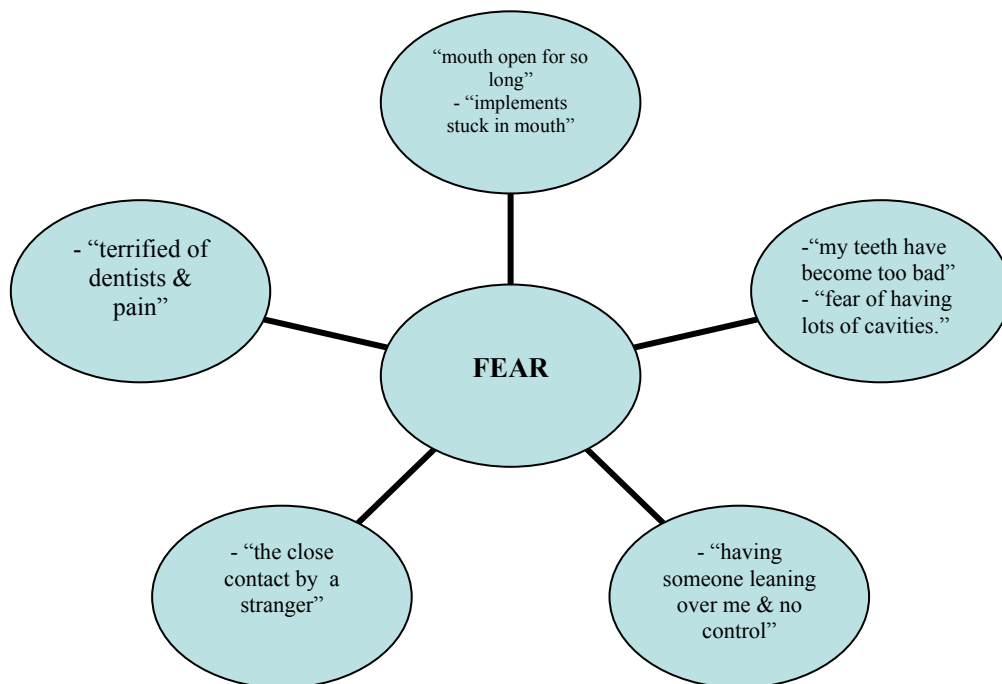


Diagram 2. Cost & waiting lists as inhibitors to dental treatment

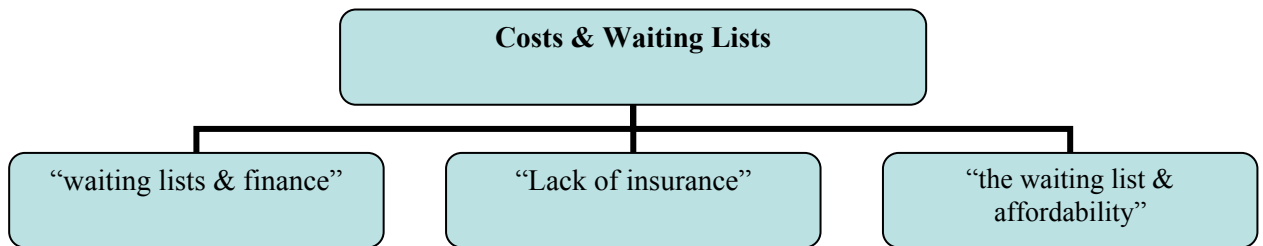
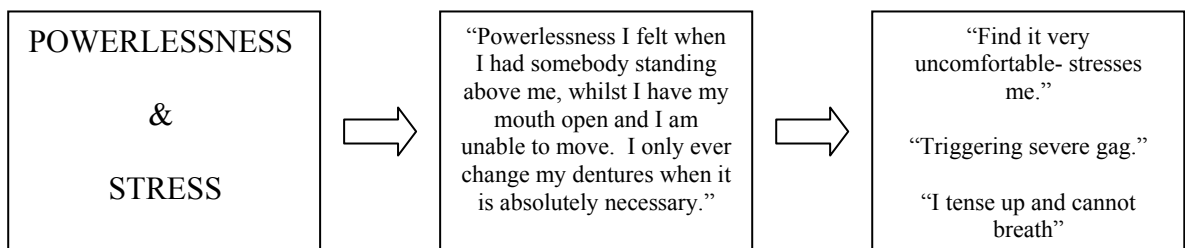


Diagram 3. Powerlessness & Stress as inhibitor to dental treatment



For the purpose of comparative data using a control group of participants who have not experienced sexual assault, a recent study by Leeners (2007) found that dental care was more anxiety provoking for victim/survivors than those in the control group. Other research studies also conclude that women who had experienced CSA had much higher levels of dental fear than those in the control group (Willumsen, 2001).

Gender Preference

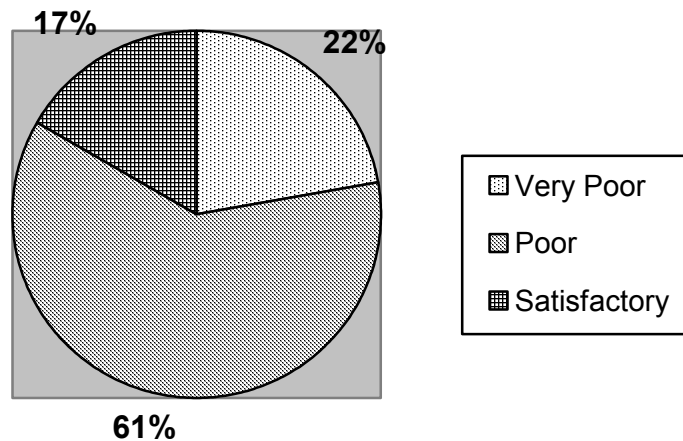
Victim/survivors expressed similar preferences for both female and male dentists. 48% of participants indicated that they preferred a female dentist while 51% specified a preference for male dentists.

ORAL HEALTH ISSUES

Current Oral Health

The overwhelming majority (61%) of those who participated rated their current oral health status as 'Poor' (see Graph 7). Smaller proportions rated their oral health status as 'Very Poor' (22%) and 'Satisfactory' (17%). No participants felt that their oral health was 'Very Satisfactory' or that they were 'Unsure' about the status of their oral health.

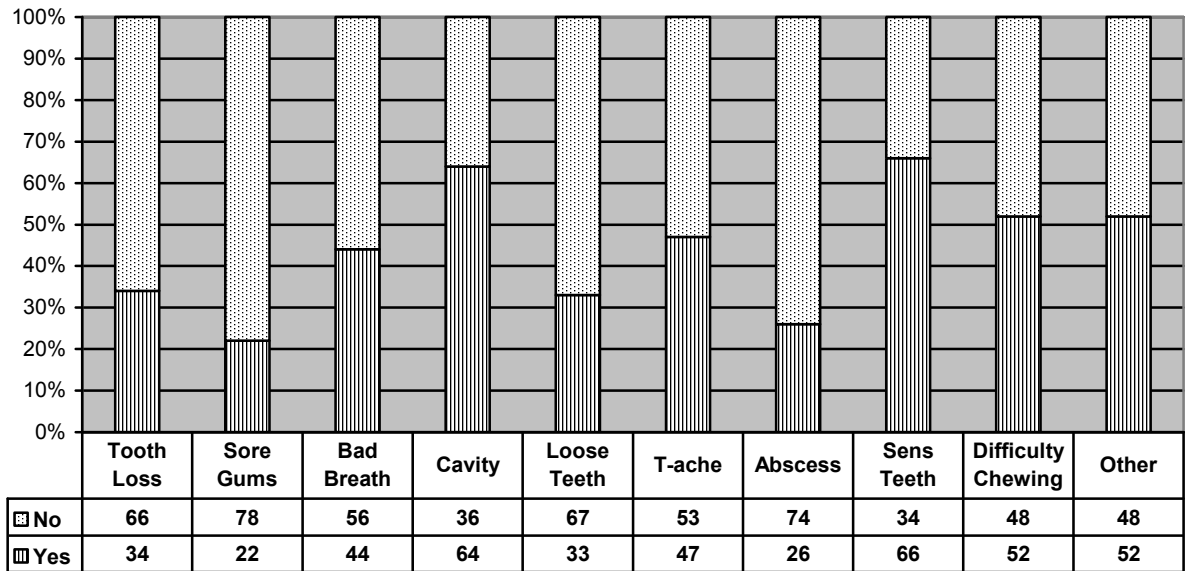
Graph 7. Victim/Survivors Oral Health Status



Oral Health Problems

Participants were asked to indicate if they experienced any of the following oral health problems: 'tooth loss', 'sore or infected gums (gum disease)', 'bad breath', 'cavities', 'loose teeth', 'toothache', 'abscess', 'sensitive teeth' and 'difficulty chewing'. Participants were also given the option to indicate 'other' problems they have experienced and provide a short description. Graph 8 illustrates a breakdown of the sample and the oral health problems they have experienced.

Graph 8. Oral Health Problems



Graph 8 displays a number of common oral health problems in the sample; ‘cavities’ and ‘sensitive teeth’. It is also clear that almost half of the population experiences the following: ‘toothache’ and ‘difficulty chewing’. 48% of participants indicated that they experienced ‘other’ oral health problems such as:

- “teeth cracking and falling apart, wisdom teeth issues that are pushing bottom teeth forward.”
- “wisdom tooth growing out the side of my gum.”
- “jaw misalignment because of arthritis in jaw point.”
- “arthritis in the jaws”
- “root canal”
- “in need of a root canal”
- “Due to my early loss of all my teeth, I am having significant problems with my bone loss in my gums, especially since menopause.”
- “osteoporosis”
- “Gag- difficult to brush teeth properly.”
- “bruised teeth”
- “loose dentures, keep biting my mouth, painful jaw.”

EXPERIENCES OF ORAL HEALTH CARE & TREATMENT

Dental Experiences

Participants were asked to discuss their past experiences of receiving dental care and treatment. The qualitative data aims to understand and explore the subjective experiences of victim/survivors and shapes the themes that inform later recommendations.

Pain

- “Early childhood to 18 years was TERRIBLE experience, very painful.”
- “Painful until I found a new dentist.”
- “Terrifying, humiliating, painless due to dissociation.”
- “Brief and painful, but overly satisfying- meaning the pain went away, but most of the teeth that I have had work on in the past have rotted away and lost their fillings.”
- “Painful”
- “I felt the dentist less patient when due to pain”

Uncontrollable reactions

- “Been terrible, uncontrollable reactions such as crying and inability to keep feet still. Saw a female dentist once who recognised that I may have experienced sexual assault in the past...she tried to help me. When I went back she had left.”

Fear & anxiety

- “I am always terrified of going to the dentist. I have a lot of fear of people (particularly men) putting things in my mouth and towering over me when I am vulnerable in that chair.”
- “Terrifying- I have had to be sedated even for something simple like a clean, I have full anxiety attacks.”
- “Frightening”
- “Very, very scary, just want to run, get me out of this chair, get away from me.”
- “scary, anxiety provoking”

- “Scary, or non-existent when I had an anxiety attack in the waiting room.”
- “Feeling of being alone and waiting...not knowing what is going to happen.”

Shame

- “shameful, humiliating”

Instruments in the mouth

- “Difficult. I do not like people putting things in my mouth. I feel forced to open my mouth.”
- “Invasion of opening mouth and keep it open...that is extremely scary and extremely forceful...forcing me to do something that I knew I had to do but didn’t want to do.”
- “More than anything it is the vibration of the drills that I cannot bare.”

Cost

- “Expensive”
- “Financial difficulties, my therapist wrote a letter to get me ahead on the list”

Miscellaneous

- “fine” (3 participants)
- “not pleasant but not any more traumatic than the average person I would say”
- “Long! Scary.”
- “Fair as well as brutal”
- “ok”
- “very mixed”

Negative Reactions During Dental Treatment

47% of participants reported experiencing negative reactions during dental treatment. A range of their reactions are listed in under the themes below:

Fear

- “Scared. Sick. Takes many needles to numb my mouth.”
- “Terror as a child, mistrust, fear, terror.”
- “Fear”

Panic Attacks & Anxiety

- “Panic attacks, sweaty, palpitations.”
- “Full anxiety attacks- once a dentist refused to give me pain relief during a root canal.”
- “Anxiety”
- “Dissociation”

Memories

- “flashbacks”

Crying

- “Crying”
- “Began to cry at one appointment- dentist mistook it for pain of drilling/touched nerve.”
- “Become upset”

Mouth & Jaw

- “Difficulty to open mouth”
- “They put things in my mouth and my heart rate goes through the roof!”
- “My jaw locked for over 2 months, I could not eat or talk properly.”
- “Cannot keep mouth open”

Irritable

- “Can’t keep still”

Control & Powerlessness

- “Loss of control”
- “Loss of my voice”

Some participants also discussed their reactions and the reactions of dental professionals stating:

- “Concerned at my reaction if I am hurt in anyway, I have problems with anger management.”
- “I received attitude from a nurse once which took me by surprise.”

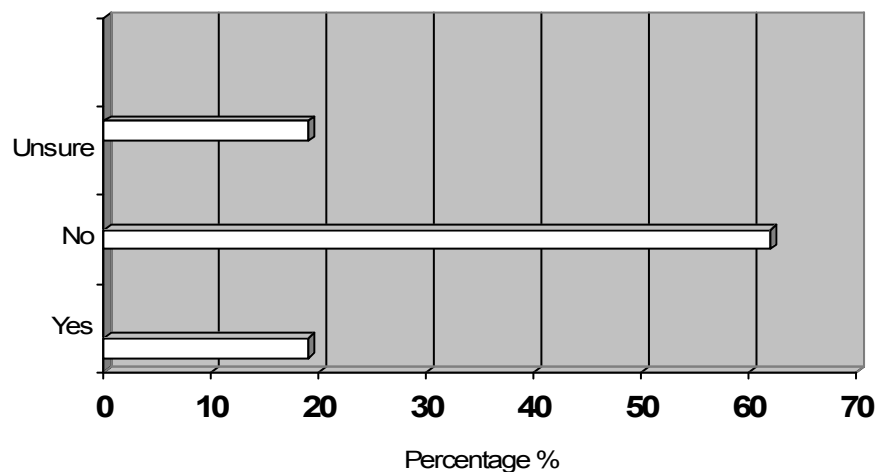
One participant reflected on her negative reactions as a child and the consequences:

- “When I was 8 years of age I had abscesses under my teeth and I was extremely frightened and in pain, but I was able to detach myself from the pain, that was the least of my worries. My father (the perpetrator) gave me a hiding because I was so frightened of the dentist and was refusing to go. My teeth condition only came to notice due to my infected tonsils, not due to the pain!!!”

DISCLOSING SEXUAL ASSAULT TO DENTAL PROFESSIONALS

A strong group of 90% indicated that they had never told a dentist about their prior sexual assault history. 24% specified that they had been asked about their sexual assault history by a dentist. 62% said that they do not want their dentist to know (see Graph 9).

Graph 9. Would you like your dentist to know about your prior sexual assault history?



FEELING SAFE - RECOMMENDATIONS

Questions regarding feeling safe were broken into four sections; waiting room, dentists chair, relationship with dental staff and during the procedure. Participants were invited to give qualitative descriptions of what would help them feel safer in each of these situations. From these responses, a number of key themes emerged around “trusting the dentist”, feeling protected, having distractions, sexual assault awareness, adequate communication and information, and increased power and control. Table 4 highlights their recommendations under each of these themes.

Table 4. Recommendations to increase safety for victim/survivors

<i>SITUATION</i>	<i>THEME</i>	<i>RECOMMENDATIONS</i>
In the waiting room	➤ Protection	<ul style="list-style-type: none"> - “having a female there” - “being alone and not around too many strangers” - “a friend, my mom.” - “someone with me” - “somebody with me so I wasn’t alone”
	➤ Aesthetics/ Distraction	<ul style="list-style-type: none"> - “nice colours on the wall” - “music, fish tank, colourful prints” - “calming music” - “not hearing the drill” - “lack of sounds of dental work” - “knowing that the surgery I went to knew about sexual assault and how it can affect someone.”

	<ul style="list-style-type: none"> ➤ Increased Control & Power ➤ Aesthetics/ Distractions ➤ Awareness ➤ Gender ➤ Protection/Personal Space 	<p>procedures”</p> <ul style="list-style-type: none"> - “The ability for me to stop proceedings at any time.” - “Being able to have a cue with dentist indicating for them to stop procedure.” - “time outs” - “getting breaks” - “less angles when the chair goes down...its daunting.” - “music or DVD to distract” - “music” - “being talked to” - “pictures...music” - “meditation music” - “understanding and support” - “dentist being confident” - “understanding that dental phobia is very real” - “a female dentist whom I could talk to” (I have never met a female dentist). - “something to cover me like a gown or something.” - “not having several people leaning and hovering over me whilst laying down” - “respecting my boundaries”
--	---	--

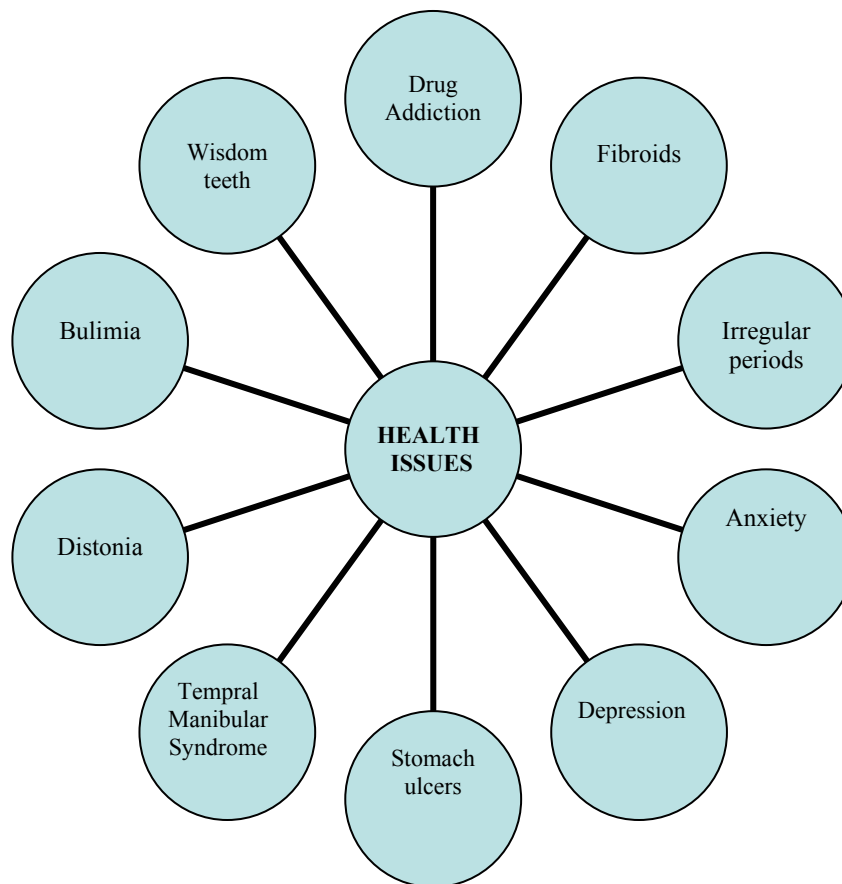
	<ul style="list-style-type: none"> ➤ Power & Control ➤ Embarrassment ➤ Distraction 	<p>going to happen during my appointment.”</p> <ul style="list-style-type: none"> - “to be given a variety of options about what is going to happen.” - “more control over procedure” - “Don’t want to be ridiculed for letting my teeth get to condition they are currently in.” - “chatting to me” - “a bit of encouragement and words to make the situation easier”
During the procedure	<ul style="list-style-type: none"> ➤ Gender ➤ Interpersonal Skills ➤ Aesthetics/ Distraction ➤ Power/Control 	<ul style="list-style-type: none"> - “having a female in the room” - “holding my hand” - “professionalism and speed” - “relaxed environment, music...my dentist always hums” - “chatting to me.” - “being talked to...grounded” - “music” - “being able to have regular breaks” (eg. A sip of water).

	<p>➤ Pain</p> <p>➤ Communication/ Information</p> <p>➤ Protection</p>	<ul style="list-style-type: none"> - “being able to stop at any point” - “knowing I could signal to stop” - “having a way to stop without being judged.” - “being able to take a break if needed.” - “Pain relief” - “having drugs (not injections) if I require/request it.” - “no pain” - “if I was asleep and didn’t know what was going on” - “a general anaesthetic!!” - “clear about what they were doing or intending to do.” - “good communication” - “being told what’s happening- step by step.” - “information” - “having someone with me.” - “less touching” - “have company throughout the whole time” (preferably someone I know). - “to feel totally relaxed & totally safe”
--	---	--

SIGNIFICANT HEALTH ISSUES

Of the 43 victim/survivor participants, 44% claim to experience considerable health issues ranging from gynaecological problems and neurological conditions to mental health concerns (see Diagram 4).

Diagram 4. Health Issues experienced by victim/survivors



PART THREE

LITERATURE REVIEW

Introduction

This literature review draws on research from the medical, dental/oral health, psychology, psychiatry, nursing, sexual assault, social work and feminist studies fields. It focuses on a number of key areas which explore the importance of oral health care, consequences of poor oral health, general dental fear and anxiety, the incidence and impact of sexual assault, sexual assault and dental experiences, the different aetiologies of dental fear for sexual assault victim/survivors and finally best practice suggestions for providing dental health care to victim/survivors. The review of relevant literature enables the reader to explore current theories and practices in addition to gaining exposure to current research studies undertaken overseas that have examined the impact of sexual assault on oral health and dental experiences. Although this literature review is extensive and incorporates the esteemed research contributions of professionals from a variety of fields, it is imperative that the bulk of this research project consisting of the accounts of victim/survivors are equally heard and respected.

The Importance of Oral Health Care & Effects of Poor Oral Health

The importance of oral health as a reflection of and influence on general health and well being has been well documented by various research studies (Chavers, Gilbert & Shelton, 2004) (AHMAC, 2001). As a general guideline the ‘*Oral Health of Australians: National Planning for Oral Health Improvement*’ Final Report (2001) defines good oral health as

“that people can eat, speak and socialise without discomfort or embarrassment, and without active disease in their mouth which affects their overall well-being”

(AHMAC, 2001, pg. 14).

This general definition encapsulates the outcomes resulting from good oral health care which includes routine oral health care at home and regular dental visits to prevent the deterioration in oral health and the need for invasive emergency treatment.

Additionally, oral health beliefs are also regarded as contributive factors to oral health status. In a study conducted by Broadbent, Thomson and Poulton (2006) investigating the link between positive oral health beliefs and increased levels of adult oral health status, the authors concluded that individuals who did exhibit more favourable beliefs towards dental care had better oral health status while unfavourable beliefs were related to poorer levels of oral health (Broadbent, Thomson, Poulton, 2006).

The consequences of poor oral health are evident at both individual and societal levels (AHMAC, 2001). Individually, the impact of reduced oral health status can be socially intrusive due to associate “pain and discomfort, difficulties with eating and speech, embarrassment or aesthetic disorders, and effects on...psychological and social wellbeing” (AHMAC, 2001, pg. 5). Furthermore, oral diseases and disorders manifesting from compromised oral health can adversely affect the mouth functions which contribute to self esteem, social interaction and a person’s general quality of life (AHMAC, 2001). On a societal level the implications resulting from poor oral health are magnified onto the Australian health care system and continue to be a burden in Australia (AHMAC, 2001) where it could be largely preventable. This has resulted in increased numbers of patients with acute dental problems and also placed further demands on health care for those with chronic diseases. This is evident in the 2007 Federal Budget where the Australian Government “announced \$377 million to fix the teeth of people suffering from chronic illness” (ABC News, 2007).

Furthermore, at a societal level, the economic costs due to the burden of illness (see diagram 1) results in reduced levels of productivity at work and school (AHMAC, 2001).

Poor oral health status does causally affect the onset of oral diseases such as dental caries (tooth decay) and periodontal diseases (gum diseases). Dental caries result from “damage to teeth by acid-producing bacteria living in the mouth (AHMAC, 2001, pg. 18),” while the specific group of periodontal diseases are “caused by

bacterial infections that affect the gums (gingivae) and the connective tissue and bone which support the teeth” (AHMAC, 2001, pg. 19). Although both can be prevented and treated if detected early, if untreated they commonly lead to edentulism (tooth loss) (AHMAC, 2001), “a key indicator of oral health status...and is (also) associated with reduced quality of life (Sanders, Slade, Carter & Stewart, 2004, pg. 549),”

The importance of oral health care and the effects of poor oral health must not be restrictive to just the mouth area but also be inclusive of potential outcomes to the health and wellbeing of the whole body. “Poor oral health status has been associated with cardiovascular disease, stroke, diabetes and preterm low birth weight babies (AHMAC, 2001, pg. 7),” in addition to gastrointestinal disorders, cerebrovascular disease and rheumatoid arthritis (AHMAC, 2001). Taking a more holistic approach allows oral health status to be mapped longitudinally and placed in a wider context with possible health outcomes for different patients and consequences of disease.

The link between periodontitis (inflammation of the gums and deeper tissue in the tooth socket) and cardiovascular disease of the heart and blood vessels has been documented (AHMAC, 2001) with the Australian Health Ministers’ Advisory Council reporting that “failure to diagnose or treat (it) effectively would leave the patient at risk of potentially life threatening cardiovascular disease” (AHMAC, 2001, pg. 9). Additionally the association between poor oral health status, chronic dental infection and coronary heart disease, cerebrovascular diseases affecting arteries within or supplying blood to the brain and atherosclerosis (fatty deposits inside arterial walls that narrow the arteries) have also been widely articulated (AHMAC, 2001) (Tuominen, Reunanen, Paunio, Paunio & Aromaa, 2003) (Scannapieco, 1998) (Okuda & Ebihara, 1998) (Beck, Pankow, Tyroler & Offenbacher, 1999) (Slade, Ghezzi, Heiss, Beck, Riche & Offenbacher, 2003).

Additionally, literature reveals that periodontal disease has been connected to other widespread illnesses and conditions such as diabetes and aspiration pneumonia (lung infection) (AHMAC, 2001). Infrequent dental visits and maternal periodontal conditions can possibly hold serious implications for both the pregnant mother and baby. These women may have a higher incidence of miscarriage late in pregnancy (Moore, Ide, Coward, Randhawa, Borkowska, Baylis & Wilson, 2004) and potentially

adverse birth outcomes and infant's with poorer oral health status (Boggess & Edelstein, 2006). A number of studies have also made conclusions between maternal periodontal diseases and the links to preeclampsia and babies born preterm and significantly underweight (Caulfield, Cutter & Dasanayake, 1993) (Berkowitz, 2003) (Kohler, Andreen & Jonsson, 1984) (Kohler, Bratthall & Krasse, 1983).

Oral Health, Dental Fear and Anxiety

Although going to the dentist can be an unnerving experience for many, dental fear and anxiety are characterised by phobic behaviours with high levels of psychological distress. This can seriously interfere with accessing oral health care and obtaining dental treatment (Leeners, Stiller, Block, Gorres, Imthurn & Rath, 2007). In this section it is important to offer a foundation for the understanding of general dental fear and anxiety, in order to later examine the specific aetiology of fear and anxiety in victims/survivors of sexual assault. This will further clarify their different experiences in subsequent sections.

Researches from the US claims that between 50-80% of adults experience dental fear and anxiety and that this is more proliferate in women than men. This fear and anxiety results in 29-35% of adults not seeking dental care on a regular basis or avoiding much needed dental treatment (Kamin, 2006). In Australia, research studies have found that approximately 16 % of the Australian population experience high dental fear, with women displaying a greater prevalence and severity (Armfield, Spencer & Stewart, 2006). 1 in 7 Australians suffering from dental anxiety (AIHW, 2002) makes it "a serious issue for patients and dental clinicians" (Armfield, Spencer & Stewart, 2006). Although these and similar estimates for dental fear and anxiety have been established in Australia and overseas, what has not been clarified in these studies is the role of previous experiences of trauma such as sexual assault in the aetiology of dental fear and anxiety.

Dental fear and anxiety act as predictors of oral health status as individuals who experience dental fear and anxiety have an increase in dental health care problems associated with phobic avoidance behaviour, poor oral care routines, less frequent visits to the dentist and increased functional impairment compared to those

individuals who do not suffer from dental fear and/or anxiety (Unell, Soderfeldt, Halling & Birkhed, 1999) (Armfield, Spencer & Stewart, 2006) (Hakeberg, Berggren & Grondahl, 1993) (Unell, Soderfeldt, Halling, & Birkhed, 1999) (Vassend, 1993) (Aartman, De Jong & Van der Meulen, 1997) (Willumsen, 2004) (Abrahamsson, Berggren, Hallberg & Carlsson, 2002) (Shuller, Willumsen & Holst, 2003). As a result, these groups of patients will require more detection, prevention and treatment of dental fear and anxiety (Willumsen, 2004) as they have a higher incidence of “toothache, discomfort with dental appearance, avoidance of food (AHMAC, 2001, pg. 62)” and have fewer remaining teeth (Armfield, Spencer & Stewart, 2006). In addition those individuals not attending the dentist regularly and suffering from dental fear and anxiety do exhibit more extensive treatment needs due to significantly poorer oral health status than those persons who attend regularly and are non-anxious and fearful (Häglin, Hakeberg, Ahlqwist, Sullivan & Berggren, 2000) (Kamin, 2006).

A number of authors outline various behaviours resulting from dental fear and anxiety that are detrimental to patient’s oral health status. Approach behaviour creates a conflict for the patient where they may want to achieve a goal such as good oral health but will avoid the situation, while ‘total avoiders’ who have very intense fear levels result in putting off appointments with dental professionals for sometimes multiple year periods (Kamin, 2006). Similarly, in a study conducted by Schuller, Willumsen & Holst (2003), it was established that dental fear individuals had a higher likelihood to not visit a dentist, often avoiding treatment and postponing dental problems (Schuller, Willumsen & Holst, 2003). This ‘vicious cycle’ of dental avoidance-dental anxiety was first suggested by Berggren (1984) in (Locker, Thomson & Poulton, 2001) as a cycle where dental avoidance further results in feelings of guilt and embarrassment due to either a real or perceived decline in dental health (Locker, Thomson & Poulton, 2001). This further intensified both dental anxiety and the subsequent avoidance of dental care. The AIHW discusses a similar notion of a ‘cycle of dental disadvantage’ among those within the population who are affected by dental anxiety and fear. In this cycle, dental care is avoided thus exacerbating oral health problems and dental visits are infrequent, if at all, resulting in dental emergencies and heightened stress for the individual (AIHW, 2002).

The aetiology of dental fear and anxiety has been widely debated (Milgrom, Weinstein & Getz, 1995) (Armfield, Spencer & Stewart, 2006) (Willumsen, 2004) (Kamin, 2006) (Moore, Brødsgaard & Rosenberg, 2004) (Abrahamsson, Berggren Gallberg & Carlsson, 2002) (Schuller, Willumsen & Holst, 2003). Some research findings have concluded that the types of dental instruments used and the related sounds and feelings experienced by the dental instrument produced the highest level of fear (Milgrom, Weinstein & Getz, 1995) and similarly Armfield, Spencer and Stewart (2006) found that women reported higher fear levels towards these stimuli. In association with the fear of instruments used in dental treatment, some individuals expressed concern over the possibility of choking while others felt anxious due to a lack of personal space with the dental professional being so close to them (Milgrom, Weinstein & Getz, 1995) (Moore, Brødsgaard & Rosenberg, 2004). Milgrom, Weinstein and Getz (1995) also reported that the atmosphere within the dental office and the treatment by staff members also plays a role in the level of fear experienced by the patient in regards to how they will be perceived and how comfortable they feel. Other studies have revealed that the sense of powerlessness experienced by certain patients (Moore, Brødsgaard & Rosenberg, 2004) (Schuller, Willumsen & Holst, 2003) coupled with the unpredictable nature of events during dental treatment adds to heightened experiences of dental fear and anxiety (Abrahamsson, Berggren, Gallberg & Carlsson, 2002).

Research examining the ways in which embarrassment can contribute to anxiety has also been conducted, concluding that feelings of awkwardness and shame are common in patients suffering from dental fear and anxiety. This is due to their neglect and avoidance of oral health which results in poorer status, multiple dental problems (Moore, Brødsgaard & Rosenberg, 2004) and often affects both their work and social lives (Abrahamsson, Berggren, Carlsson, 2000). Those who experience dental fear and anxiety also may feel shame and embarrassment over their negative and uncontrollable reactions during treatment (Abrahamsson, Berggren, Gallberg & Carlsson, 2002).

Some literature notes that at times patients with dental fear have believed that the dentist lacked empathy towards them and “did not bother to listen to their signals or care about whether they were in pain (Abrahamsson, Berggren, Gallberg & Carlsson,

2002). Other studies have responded to this by reinforcing the role of both dentists and other dental professionals in these situations and educating them in how best to assist and work with patients who exhibit dental fear and anxiety. Armfield, Spencer & Stewart highlight the importance of having both great responses to pain control and alleviating the negative perceptions held by patients (Armfield, Spencer & Stewart, 2006). Due to the fact that dental anxiety does impact “upon both dental status and the use of dental services (AIHW, 2002, pg. 79),” other literature encourages dental professionals to communicate with and empower patients suffering from dental fear and anxiety to improve their dental experiences (AHMAC, 2001, pg. 63). Although this is a primary goal for dental professionals, studies also confirm that these measures can also be difficult to achieve as anxious patients take longer to treat and can sometimes miss or fail to attend their appointments (Häglin, Hakeberg, Ahlqwist, Sullivan & Berggren, 2000).

Incidence & Impact of Sexual Assault

Recent statistics illustrate that the incidence of sexual assault encompassing both childhood sexual abuse and recent sexual assaults within the community are significant. The true incidence is underreported as many victims do not disclose and/or report sexual assaults to police, “in 2005, there were an estimated 44,100 persons aged 18 years and over who were victims of at least one sexual assault in the 12 months prior to the survey; a victimisation prevalence rate of 0.3% (and) approximately 72,000 incidents of sexual assault were experienced by these victims” (ABS, 2005, pg. 7). The growing occurrence of sexual abuse against children was reviewed in 1999 by Fergusson and Mullen who through their research concluded that approximately 34% of girls (1 in 3), and 20% of boys (1 in 5) have been or will be sexually violated by the age of 18 (Fergusson & Mullen, 1999).

The impact of recent and past sexual assault affects not only individuals, but also their family and friends, and the wider community including health care professionals. CSA can have long term emotional, cognitive and behavioural consequences for victim/survivors. Emotionally, victim/survivors may suffer from depression, guilt, fear, shame, anxiety, panic attacks and/or have a complete absence of emotional

reactions (Hall & Lloyd, 1993) (Mullen et al, 1993) (Courtois, 1993) (Hendricks-Matthews, 1993) (Herman, 1992). Cognitive effects can include flashbacks, suicidal thoughts, dissociative problems, confusion, lowered levels of self esteem and/or initiative and relationship difficulties later in life (Fleming, Mullen, Sibthorpe & Bammer, 1999). Behaviourally, consequences may include substance use, compulsive and obsessional problems, self harm, negative reactions to medical procedures and eating disorders. Victim/survivors may also feel uncomfortable in situations where they have low levels of control (Willumsen, 2001) and have a “reluctance to trust others and (thus) attempt to control a situation when feeling vulnerable” (Stalker, Carruthers Russell, Teram & Schachter, 2005, pg. 1278). In reflecting on these long term impacts of sexual assault, it is useful to consider the interplay between them and situations that may provoke anxiety and how this may influence approach to or avoidance of health care and dental treatment (Bynes, 2003).

Sexual Assault and Dental Experiences

Although research has explored the origin, consequences and treatment of dental fear in Australia (Armfield, Spencer & Stewart, 2006), data examining the specific impact of sexual assault on dental fear and treatment are limited to overseas studies (Leeners, Stiller, Block, Görres, Imthurn & Rath, 2007) (Willumsen, 2004, 2001) (Bynes, 2003) (Hays & Stanley, 1996) (Walker, Milgrom, Weinstein, Getz & Richardson, 1996). In one such study by Abrahamsson, Berggren, Gallberg & Carlsson (2002) it was concluded that “traumatic experiences outside dental care were related to the onset of dental fear” (Abrahamsson, Berggren, Gallberg & Carlsson, 2002, pg. 192). These studies have established and documented that dental fears related to past and/or present sexual assault does have different aetiologies to general dental fear experienced by patients who do not have a sexual assault history (Willumsen, 2004) (Locker, Thomson & Poulton, 2001) (Walker, Milgrom, Weinstein, Getz & Richardson, 1996).

It is evident that past psychological trauma can contribute significantly in influencing the dental fear of sexual assault victim/survivors. “At the moment of trauma, the victim is rendered helpless by overwhelming force” (Herman, 1992, pg. 33) with

feelings of “intense fear, helplessness, loss of control, and threat of annihilation” (Herman, 1992, pg. 33). The likelihood of harm is connected to feelings of surprise and being trapped and further heightened when the event included physical injury or violation (Herman, 1992). Additionally, links between the trauma experienced by victim/survivors, Vietnam veterans and Holocaust survivors has been established. The person becomes inundated by terror and helplessness, their “perceptions become inaccurate and pervaded with terror” (Herman, 1992, pg. 35), functions of judgement and discrimination stop working and “the functions of the autonomic nervous system may also become disassociated” (Herman, 1992, pg. 35).

There are issues and associated difficulties for both patients and dental professionals in gathering data and compiling statistics of the number of total patients who are victim/survivors of sexual assault so these estimations are currently not available. These barriers exist in part; as it is not always appropriate to question a patient about their past sexual assault history unless a long established relationship exists with the dental practitioner (Kamin, 2006) that is built on trust and respect. Women who are victim/survivors of CSA may also experience increased difficulty in establishing a trusting relationship with dental professionals, especially males (Willumsen, 2001) (Willumsen, 2004). Willumsen (2001) found mixed response in regards to disclosing some patients reporting improvements after disclosing and others believing that the disclosure was not taken seriously by the dentist (Willumsen, 2001).

In an attempt to shed some light on the prevalence of victim/survivors of sexual assault amongst dental patients, research by Leeners, Stiller, Block, Gorres, Imthurn and Rath (2007) claim that “**around 20% of female patients seeking dental care may have experienced childhood sexual abuse**” (Leeners, Stiller, Block, Gorres, Imthurn & Rath, 2007, pg. 580). Although this study is groundbreaking in its attempts to encapsulate the extent of CSA impacting dental experiences, it is also somewhat limiting as it does not validate the experiences of male victim/survivors of CSA (Willumsen, 2001) who also seek dental care and treatment. Furthermore, in compiling this literature review, no studies explored the dental experiences of male victim/survivors.

It has been established that “trauma appears to be significantly associated with elevated dental fear (Walker, Milgrom, Weinstein, Getz & Richardson, 1996, pg. 485),” which is in turn then magnified in patients who are victim/survivors of sexual assault. In addition, Walker, Milgrom, Weinstein, Getz & Richardson (1996) found that “women with high dental fears were significantly more likely to have been victims of trauma than women with low dental fear scores” (Walker, Milgrom, Weinstein, Getz & Richardson, 1996, pg. 488). A similar research study by Leeners, Stiller, Block, Gorres, Imthurn & Rath (2007) concluded that 33% of its female respondents indicated that “CSA experiences influenced (their) dental visits” (Leeners, Stiller, Block, Gorres, Imthurn & Rath, 2007, pg. 582). Additionally, the Journal of Psychosomatic Research (Leeners et al, 2007) reports that in comparison to controls, “women exposed to CSA exhibited several long-term effects on dental care in terms of major psychological strain during dental treatment (Leeners et al, 2007, pg. 581),” which can be triggered as some sexual assault involves the mouth area. In this study, 28% of victim/survivor respondents suffered from flashbacks during dental treatment and others experienced related PTSD symptoms such as dissociation and acute anxiety (Leeners et al, 2007).

Dental work can be intrusive and may potentially trigger memories and evoke intense levels of distress (Esposito, 2006). The patient may cry uncontrollably and without warning (Bynes, 1993) (Kamin, 2006) or dissociate and/or experience a flashback. Some patients may dissociate with pain and become under-reactive during dental treatment due to increased sensitivity to pain as a result of trauma (Hays & Stanley, 1996). Leeners et al (2007) research that interviewed 85 dental patients who were victim/survivors of sexual assault found that main triggers for flashbacks included verbal statements by dental professionals such as ‘it will not hurt’, lying horizontally in dental chair, lack of announcement before treatment, feeling helpless, being touched on the mouth, head or neck, having to keep motionless during treatment and anticipating or experiencing pain (Leeners et al, 2007, pg. 585). Furthermore, odorants may act as stimulants influencing “cognition, emotion, and behaviour (Robin, Alaoui-Ismaili, Dittmar & Vernet-Maury, 1998, pg. 1638),” and may also trigger dissociation and/or flashbacks from common odours in dental surgery such as latex dental gloves.

In whole, it is the psychological effects of experiencing sexual assault that may most differentiate dental care experiences for this patient group in comparison to patients who do not have a sexual assault history (Willumsen, 2004). When these two groups of women were compared in studies it was established that female victim/survivors of sexual assault held more negative views of dental treatment (Willumsen, 2001). Similarly, Hays and Stanley (1996) also claim that “survivors are much more likely to experience various types of distress while at the dentist than are their counterparts” (Hays & Stanley, 1996, pg.71).

In a research study conducted by Armfield (2006) examining the role of cognitive vulnerability in the etiology of fear, he proposes that it is important to consider that “how an individual perceives a stimulus...as being critical in determining fear in relation to the stimulus” (Armfield, 2006, pg. 746). In addition, he discusses a Cognitive Vulnerability Model (see Appendix 6) that is created by how the stimulus may be perceived as by the patient as disgusting, dangerous, uncontrollable and/or unpredictable (Armfield, 2006) and that specific phobias are “defined as a marked and persistent fear that is cued by circumscribed or clearly discernible objects or situations” (Armfield, 2006, pg. 746). These discoveries hold much value for understanding the aetiology of dental fear for victim/survivors and the impact this has on their dental experiences and thus further analysis of dangerousness, unpredictability and uncontrollability variables are explored in the subsections below.

- *Danger*

The degree of danger that may be experienced by dental patients who are victim/survivors of sexual assault may be represented through parallels of dental treatment that may be reminiscent of the abuse. These parallels have been commented on by various authors (Hays & Stanley, 1996) (Walker, Milgrom, Weinstein, Getz & Richardson, 1996) (Kamin, 2006) (Leeners et al, 2007) (Stalker, Caruthers Russell, Teram & Schachter, 2005) who conclude through their research that victim/survivors may experience indirect similarities which then in turn heightens their sense of danger triggering secondary responses such as flashbacks, acute anxiety and dissociation.

Kamin (2006) and Leeners et al (2007) discuss the possible verbal parallels between what the perpetrator may often say to the abused about pain and comments that dentists may unknowingly make about the degree of pain to expect during treatment; ‘it wont hurt’ or ‘it will be good for you in the end’. Hays and Stanley (1996), Walker, Milgrom, Weinstein, Getz & Richardson (1996), Willumsen (2001) (2004) and Leeners et al (2007) examine the similarities for the patient in that they are often alone with the dentist who is male and in a more powerful and authoritative position, that they are reclined horizontally in the dental chair, the dentist is in close physical proximity to them and the mouth area inserting instruments, there are restrictions on the patient talking and the patient anticipates and/or experiences pain. These aspects can be difficult for the victim/survivor as they are expected to trust the dental professional (Stalker, Caruthers Russell, Teram & Schachter, 2005) and much like what perpetrators may do to their victims, professionals may unknowingly assure the patient that what they are doing will be beneficial for them. Similarly, Stalker, Russell, Teram & Schachter (2005) also make reference to the parallels for victim/survivors between sexually abusive situations and aspects of receiving dental treatment, as the patient is “expected to lie passively in a chair with the clinician working above him or her” (Stalker, Russell, Teram & Schachter, 2005, pg. 1278).

- *Unpredictability*

The unpredictability inherent when dental procedures are not explained fully or patients are unaware of dentist’s movements (Armfield, 2006) can act as a stimulus to fear/anxiety experienced by the victim/survivor, contributing “to both the development and maintenance of (the) anxiety and fear” (Armfield, 2006, pg. 755). The patient may resist opening their mouth, limit the extent, turn their head away in the opposite direction or stop the dentist by holding onto their arm (Bynes, 1993) (Kamin, 2006). Often the unpredictability within the dental setting for the victim/survivor may stem from not having thorough information about the treatment and what to realistically expect in terms of what the dentist will be doing and pain that might be experienced during the procedure (Hays & Stanley, 1996).

- *Uncontrollability*

Uncontrollability of the stimulus in the dental setting can provoke fear and anxiety (Armfield, 2006) in patients who are victim/survivors of sexual assault as these patient groups have difficulties with situations that evoke a lack of control and helplessness (Walker, Milgrom, Weinstein, Getz & Richardson, 1996). Patients may have difficulty with being reclined too far back in the dental chair (Bynes, 2003) triggering feelings of becoming trapped (Walker, Milgrom, Weinstein, Getz & Richardson, 1996) and frightened of losing control (Willumsen, 2004). Due to the increased sensitivity in the mouth area for this patient group and their lowered ability to tolerate the discomfort associated with having instruments inserted in the mouth (Leeners et al, 2007) (Willumsen, 2004) (Willumsen, 2001), they may feel powerless and fear gagging or choking (Walker, Milgrom, Weinstein, Getz & Richardson, 1996). According to Weinberg and Levine (1980) cited in Armfield (2006), physiological responses to fear and anxiety triggered by a lack of control can be reduced by having more “control over an aversive stimulus (Armfield, 2006, pg. 757),” while other literature notes the importance of the patient-dentist relationship and communication in allaying fears and anxiety and promoting feelings of safety and controllability (Abrahamsson, Berggren, Hallberg, Carlsson, 2002).

In summary, “a stimulus automatically and unconsciously triggers its respective vulnerability schema (Armfield, 2006, pg. 760)” which is an “emotionally deep and highly motivational feeling which represents the experience of susceptibility to an outcome considered aversive (Armfield, 2006, pg. 758),” and can be clearly linked to some victim/survivors experience of dental treatment. A patient’s vulnerability schema (see diagram 2), in relation to the various stimulus within the dental setting becomes “automatically and almost simultaneously activated following the perception of a fear-relevant object or stimulus (Armfield, 2006, pg. 759),” often demonstrated for some victim/survivors through their uncontrollable and sometimes “unconsciously evoked (Armfield, 2006, pg. 759) reactions to stimulus such as reclining in the dental chair and having dental instruments inserted into the oral cavity. This Cognitive Vulnerability Model exhibits important theoretical and practical suggestions that may

be useful for dental professionals in understanding and responding to the dental anxiety and fear of patients who may be victim/survivors of sexual assault.

Furthermore, sexual assault can impact on a victim/survivors dental health including their teeth status/problems, arranging and attending appointments and their dental experiences through treatment avoidance (Kamin, 2006) (Bynes, 2003) (Hays & Stanley, 1996). Bynes (2003) reports that sometimes victim/survivors may be unaware of the reason why they are so fearful of attending the dentist which can lead to subsequently avoiding dental treatment. Difficulties with and affects of scheduling and/or cancelling appointments have been well documented in both current and past research (Stalker, Caruthers Russell, Teram & Schachter, 2005) (Hays & Stanley, 1996) (Abrahamsson, Berggren, Hallberg & Carlsson, 2002) (Willumsen, 2004) (Willumsen, 2001) (Leeners et al, 2007). In a study conducted by Willumsen (2001), it was found that 40% of female victim/survivors cancelled dental appointments due to fear and anxiety. Not only does this present challenges for dental professionals working with these women, but it can also create additional stress as these patient groups have deteriorating oral health status and require longer treatment procedures and intervention (Abrahamsson, Berggren, Hallberg & Carlsson, 2002) (Hays & Stanley, 1996).

Providing Dental Health Care and Treatment to Victim/Survivors of Sexual Assault

Sexual assault impacts both health and health related behaviours (Young & Katz, 2001) due to issues such as triggering reminders of the assault (Esposito, 2006), authority, power, control and trust (Roberts, Reardon & Rosenfeld, 1999). It is for these reasons that all health care providers need to be knowledgeable about sexual assault and understand the implications for providing care to these patients (Roberts, Reardon & Rosenfeld, 1999). Dental professionals are not exempt from these expectations in their role as health care providers and they “should not avert their attention from this important social and public health problem (Walker, Milgrom, Weinstein, Getz & Richardson, 1996, pg. 489),” thus the importance of all dental staff being educated in these issues and having an awareness of its emotional impact on

dentistry (Bynes, 1993) (Stalker, Carruthers Russell, Teram & Schachter, 2005) is paramount.

Although the dental professional's primary concern and focus is the patient's mouth and oral health, the patient must be treated holistically as a "whole" person with attention paid to the patient's history (Kamin, 2006) and the possible long term implications of sexual assault on receiving dental care and treatment (Stalker, Russell, Teram & Schachter, 2005). It may also be useful for dental professionals to communicate and work in collaboration with the patient's mental health care worker, psychiatrist and/or psychologist as a means to developing a treatment plan with the patient (Walker, Milgrom, Weinstein, Getz & Richardson, 1996) (Willumsen, 2001). It is this level of understanding, an awareness of sexual assault prevalence and possible associated dental fears for victim/survivors (Willumsen, 2001) that is more likely to impart these patients with more positive dental experiences (Stalker, Russell, Teram & Schachter, 2005) by informing dental professionals in ways that encourage them to engage sensitively with the patient and take actions to avoid re-traumatisation (Hays & Stanley, 1996).

What is important to remember is that dentists and other dental professionals are not expected to be specialists in the issues facing victim/survivors but more realistically embody an awareness of the long term traumatic effects of sexual assault that will inform their practice and allow them to work with these patients in ways that are both sensitive and appropriate (Stalker, Carruthers Russell, Teram & Schachter, 2005). Considering the prevalence of sexual assault within the community, it should be acknowledged that "dentists probably see patients with such histories several times a week (Stalker, Carruthers Russell, Teram & Schachter, 2005, pg. 1277)," so practising from an informed position that understands trauma and the impacts on the brain's processing of memories (Kamin, 2006) can equip all dental professionals with the skills to "adjust their treatment plans to the specific needs of these patients" (Leeners, Stiller, block, Gorres, Imthurn & Rath, 2007, pg. 581).

Understanding these mechanisms behind behaviour may help the dental professional to avoid unintentionally making the situation worse for the patient (Kamin, 2006) through misunderstanding or responding ineffectively to their experience (Milgrom in

Kamin, 2006) (Willumsen, 2001). Having an awareness of the behaviours occurring before and during treatment that may indicate that a patient is a victim/survivor of sexual assault, will facilitate the dental professional in observing physiological arousal that may occur during the treatment/procedure (Willumsen, 2004) (Kamin, 2006). Additionally, it should be noted that dental professionals should not necessarily jump to conclusions about patient's sexual assault history and confront the patient but more so be informed as to ensure that they are not prevented by insecurity or lack of knowledge in evaluating the patient's experience of dental care and treatment (Willumsen, 2004).

As discussed in earlier sections there are a number of signs that may indicate a history of sexual assault in a patient that presents in a dental setting, these may include but are not limited to: resisting horizontal decline in chair, fearfulness of having objects placed over the face, sudden crying outbursts, gagging and involuntary head movements away from the dentist as approaching mouth area for treatment (Bynes, 2003) and approach behaviour characteristics influencing the scheduling of appointments (Kamin, 2006). Developing a trusting and respectful relationship with the patient is of paramount importance to opening up a space that encourages victim/survivors to their voice experiences of and difficulties with dental treatment in ways that do not require a disclosure of past assault" (Teram, 1999, pg. 586). Also acknowledging that disclosure in words is sometimes not possible due to trust issues, stigmatisation and "uncertainties about how others may respond (Bonanno, Noll, Trickett, Keltner, Putnam & LeJeune, 2002, pg. 94)," may encourage dental professionals to examine changes in facial expressions of emotions as playing a role in non-verbal indicators.

Literature also acknowledges the difficulties inherent in time restrictions experienced by dental professionals (Leeners et al, 2007) (Stalker, Carruthers Russell, Teram & Schachter, 2005) and how this may impact their capabilities in working with victim/survivors of sexual assault. In mindfulness of this limitation a number of research studies have offered practical suggestions for working with victim/survivors that can be adapted and/or extended upon depending on level of awareness /knowledge about sexual assault, confidence in working with the implications in a dental setting and time. These recommendations are outlined below:

- Allow more time in scheduled appointments to treat patients displaying approach behaviour characteristics (Kamin, 2006)
- Be non-authoritative in approach (Bynes, 2003), avoid taking control and making statements such as “You can’t possibly feel that (Kamin, 2006, pg. 58),”
- Allow the patient to have more control during dental procedures by (Armfield, Spencer & Stewart, 2006) ‘watching’ parts of treatment via a small mirror (Leeners et al, 2007) to provide added security (Stalker, Carruthers Russell, Teram & Schachter, 2005).
- Check in with patient (Stalker, Carruthers Russell, Teram & Schachter, 2005); give the patient breaks during treatment and procedures (Armfield, Spencer & Stewart, 2006) or the option to stop treatment (Leeners et al, 2007).
- Provide adequate information and explanation about treatment and procedures (Armfield, Spencer & Stewart, 2006) (Leeners et al, 2007) (Stalker, Russel, Teram, Schachter, 2005); “inform before you perform (Stalker, Carruthers Russell, Teram & Schachter, 2005) to reduce anxiousness and powerlessness.
- Use sufficient levels of anaesthesia and dental instruments with reduced noise (Leeners et al, 2007)
- Access education and information for all dental professionals and staff in surgeries about sexual assault and the specific needs of victim/survivors (Leeners et al, 2007).
- Provide distractions during treatment (Leeners et al, 2007)
- Encourage and assist the patient in utilising relaxation techniques (Leeners et al, 2007) such as deep breathing, mental imagery, self-talk strategies (Hays & Stanley, 1996) or muscle relaxation (Walker, Milgrom, Weinstein, Getz & Richardson, 1996).
- Ask for the patient’s permission before performing any treatment and/or procedures (Stalker, Russell, Teram & Schachter, 2005).
- Understand that in CSA the child is usually alone with someone who is older and in a more authoritative position, which can reflect the dynamics

in dental setting (Stalker, Russell, Teram & Schachter, 2005) and thus allow the patient to bring in a trusted person (Leeners et al, 2007), leave door open in dental surgery or have a dental assistant present (Hays & Stanley, 1996).

- Provide pre-warnings about pain (Hays & Stanley, 1996)
- Position the dental chair in a more upright position (Hays & Stanley, 1996) or allow patient to negotiate inclination in small increments (Walker, Milgrom, Weinstein, Getz & Richardson, 1996). Explain the importance of tilting the chair for visibility and better treatment (Stalker, Carruthers Russell, Teram & Schachter, 2005) and/or try to limit the amount of time spent lying back in the dental chair (Office for Victims of Crime, 2004)
- Increase dental professional's awareness about patient's need for personal space and boundaries which may mean they adjust their degree of leaning in towards patient or touching their body (Hays & Stanley, 1996).
- Have the option for these patients's to have a pre-appointment with the dentist or dental hygienist to familiarise with surgery and discuss concerns about treatment (Hays & Stanley, 1996).
- Optional question on initial patient history questionnaire that may facilitate discussion around dental fear/anxiety and specific triggers for patient" (Armfield, Spencer & Stewart, 2006). Examples such as 'Are there any parts of dental treatment that are particularly difficult for you?' 'Is there anything we can do to help you feel more comfortable?' 'Is there anything you need?' (Stalker, Carruthers Russell, Teram & Schachter, 2005, pg. 1280).
- Use voice to work with patient; "a slow, low keyed monotone soothes the patient" (Bynes, 1993, pg. 74).
- Establish trust and follow through on promises by developing hand cues with the patient so that they can indicate levels of anxiety or the need to stop treatment (Bynes, 1993) and remember to review signals after some time (Stalker, Carruthers Russell, Teram & Schachter, 2005).
- Improve psychological skills in detecting and treating dental fear and anxiety (Bynes, 1993) (Armfield, Spencer & Stewart, 2006).

- Offer a same day appointment (if available) for the day when patient feels ready which may help to avoid short notice cancellations (Stalker, Carruthers Russell, Teram & Schachter, 2005).
- Ensure that messages about dental care and hygiene are phrased “so as not to appear scolding or condescending; ‘How can I help you take better care of your teeth?’” (Stalker, Carruthers Russell, Teram & Schachter, 2005, pg. 1280).
- Be open to possibility of using vinyl instead of latex gloves (Stalker, Carruthers Russell, Teram & Schachter, 2005).

Although these suggestions may feel repetitious to the dental professional (Stalker, Carruthers Russell, Teram & Schachter, 2005), using them may increase the patients’ sense of control, safety and empowerment can decrease their level of discomfort (Hays & Stanley, 1996). Any measures that reduce a patients feeling of “isolation, helplessness, or unwanted intimacy (Hays & Stanley, 1996, pg. 71),” can decrease cues that are evocative of their assault history and can add to their feelings of being protected. Thus, all “dental practioners should take care to avoid all forms of coercion and paternalism during treatment planning (Walker, Milgrom, Weinstein, Getz & Richardson, 1996, pg. 489),” that do not honour the patients need for some sense of control and power in the dental setting. Educating clients so that they can become empowered, self directed and taker their own action in collaboration with the dental professional (Hays & Stanley, 1996) can add to the patient feeling in control and the onus to assist a patient not being solely on the dental professional.

Furthermore, it is of paramount importance that the dental professional keeps in mind that the behaviour exhibited by the patient is “not rational and, therefore, is not easily controlled by the patient (Bynes, 1993, pg. 75),” so it is important to be educated as to the motivation behind the patients behaviour and also strategies to effectively deal with it (Bynes, 1993). By providing patients with a greater sense of control and predictability, dental professionals may be able to assist in alleviating their levels of fear and anxiety (Armfield, Spencer & Stewart, 2006) and thus create more positive dental experiences that may encourage their attendance to regular checkups and improve their oral health status and functioning.

PART FOUR

REPORT ON THE RESEARCH

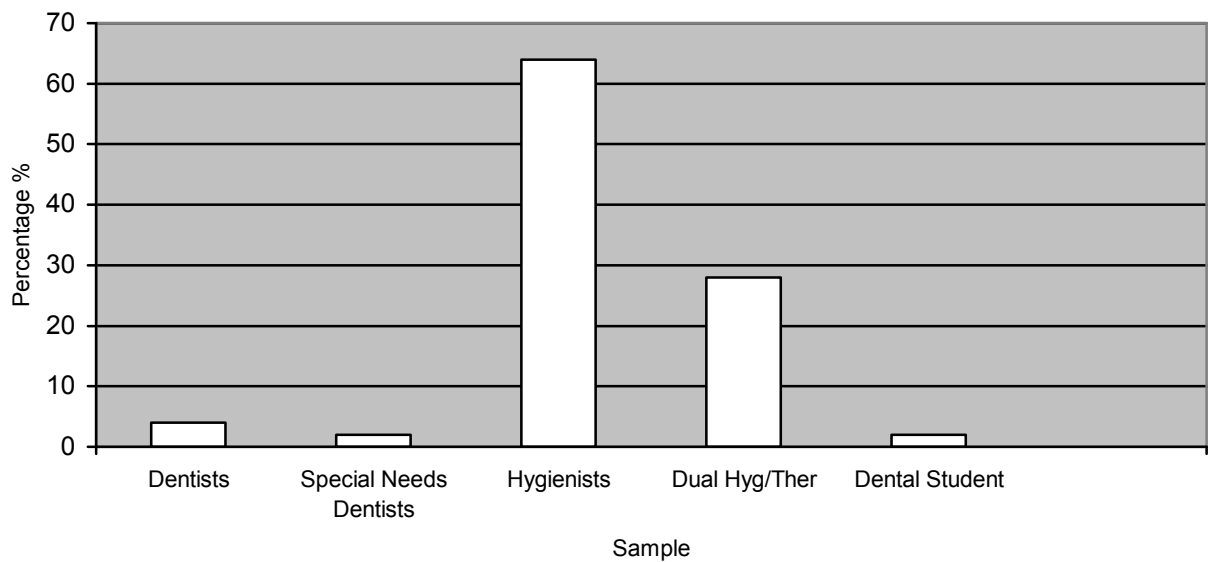
FINDINGS

1) 'Exploring Dental Professionals Awareness' Survey

Sample

In total, 50 participants took part in the 'Exploring Dental Professionals Awareness' Survey. Although the sample aimed to be inclusive of all dental professionals, it consists of dental hygienists, dentists and dually trained dental hygienist/therapists (see Graph 10).

Graph 10. Dental Professionals sample population



Awareness around sexual assault myths

The following myths surrounding sexual assault were posed to participants:

- Sexual assault is an unusual occurrence and rape is rare
- Childhood Sexual Assault (CSA) has no long term effects

- Health professionals have a responsibility to respond appropriately to survivors of sexual assault

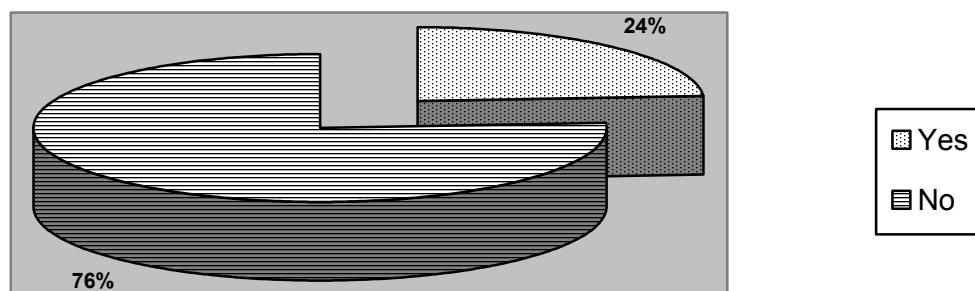
96% of participants reported that sexual assault is not an unusual occurrence and rape is not rare. This indicates a majority positive awareness amongst dental professionals about the incidence of sexual assault within the community but also highlights a need for further information around sexual assault prevalence for some professionals.

100% of the dental professional sample indicated respectively that CSA does have long term effects and that health professionals do have a responsibility to respond appropriately to victim/survivors of sexual assault. These findings regarding the long term effects of CSA and the role of all health care professionals in responding to victim/survivors are optimistic and encouraging.

The impact of sexual assault on oral health

Graph 11 illustrates the different level of awareness amongst dental professionals around the impact of sexual assault on the oral health of victim/survivors. 12 participants (24%) indicated that they were aware of the impact while 38 dental professionals (76%) did not have an awareness of the impacts.

Graph 11. Awareness of the impact of sexual assault on oral health



The participants who felt that they had an understanding of the impacts of sexual assault on oral health listed the following:

Mouth/Facial Area

- “being touched near the mouth”

- “scarring”
- “infection...STI’s”
- “damage to teeth and soft tissue”
- “Doesn’t like objects placed into mouth, even tooth brushing can be an issue.”
- “facial bruising, swelling, cuts etc”
- “ulcers in mouth”
- “burns in mouth”
- “broken teeth, cuts to the face (black eye, bruises)
- “grinding/TMS joint problems due to stress”
- “decay etc associated- onset of eating disorder”
- “Bruxism abrasion, erosion, caries”

Psychological/Emotional

- “anxiety”
- “low self esteem leading to poor oral habits and diet”
- “doesn’t like people sitting too close (invasion of personal space)”
- “Phobias/ fears of...things. Eg. Claustrophobia? Fear of strangers?”
- “Increased fear and anxiety associated with dental appointments.”
- “fear of anything oral”
- “Depression, lack of motivation...poor oral hygiene.”
- “post traumatic stress”
- “reliving feelings of the attack”
- “feelings of vulnerability and lack of trust”
- “Fear of allowing people to treat oral complaints...caries, periodontal disease etc.”
- “brings back memories”

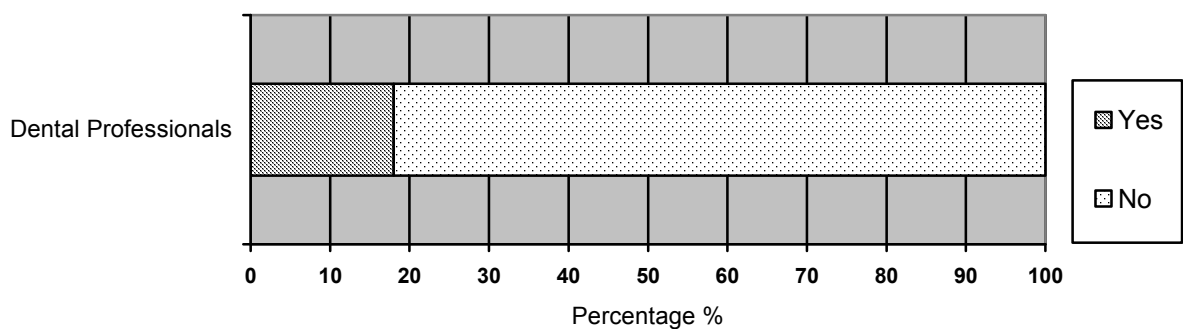
Dental Attendance

- “reluctance to attend appointments”
- “increased gum disease (caries) due to lack of visits”
- “higher rate of failure to attend dental appointments”
- “oral health often neglected and only seek emergency treatment”

The awareness of sexual assault victim/survivors in own practice

Only 9 of participants (18%) claimed to have ever wondered whether a patient in their own practice may have been a victim/survivor of sexual assault (see Graph 12). This result may be reflective of the significantly lower level of awareness of the impacts of sexual assault on oral health.

Graph 12. Awareness of victim/survivors in own practice



Identifying and responding to victim/survivors in dental practice

Dental professionals who did believe that they had victim/survivors as patients in their own practices gave the following reasons for their belief:

Mouth/Facial Area

- reaction to “being touched near the mouth”
- “evidence on the patients palate”
- “cause of damage did not seem plausible”

Psychological/Emotional

- “fear of anything oral”
- “The patient had OCD tendencies and acts weird??”
- “very anxious, phobic, untrusting behaviour”
- “extreme anxiety and dental avoidance behaviour”
- “No obvious fear from childhood dental experiences, eg. Fear of needle, drill etc.”

Pain

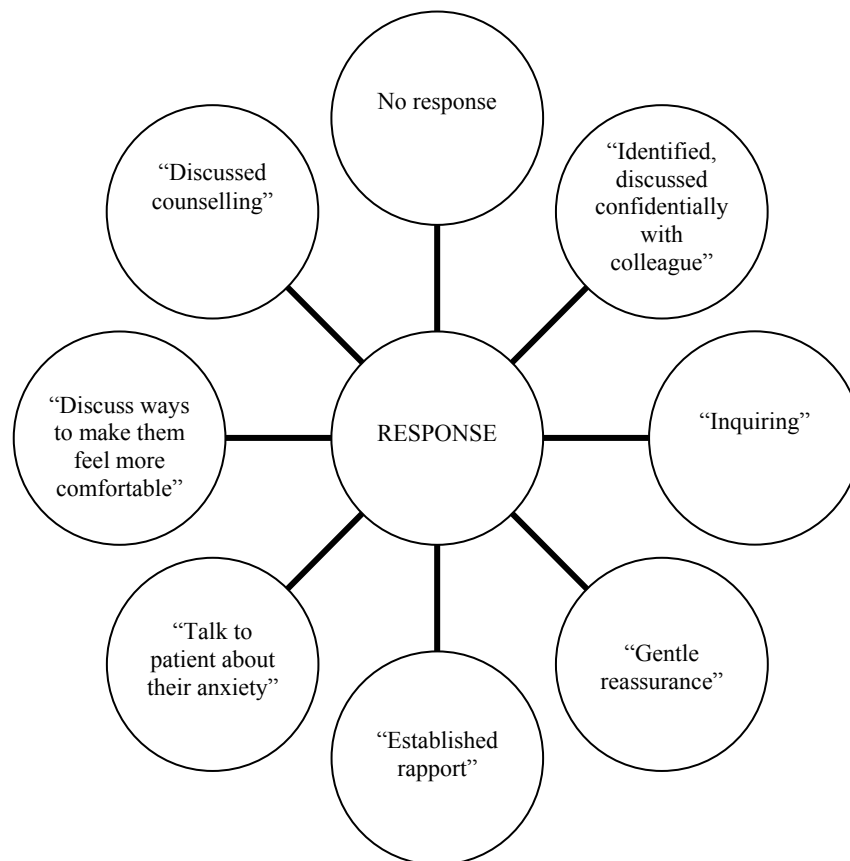
- “long term problems and often pain”
- “patients often request general anaesthetic for treatment”

Discussion with patient

- “we spoke about it”
- “when spoken about upbringing, seemed agitated, nervous about this subject”
- “by how they answer or discuss relevant topics”

Diagram 5 displays the varied ways of responding for the dental professionals who believed that they had patients in their practice who were victim/survivors of sexual assault.

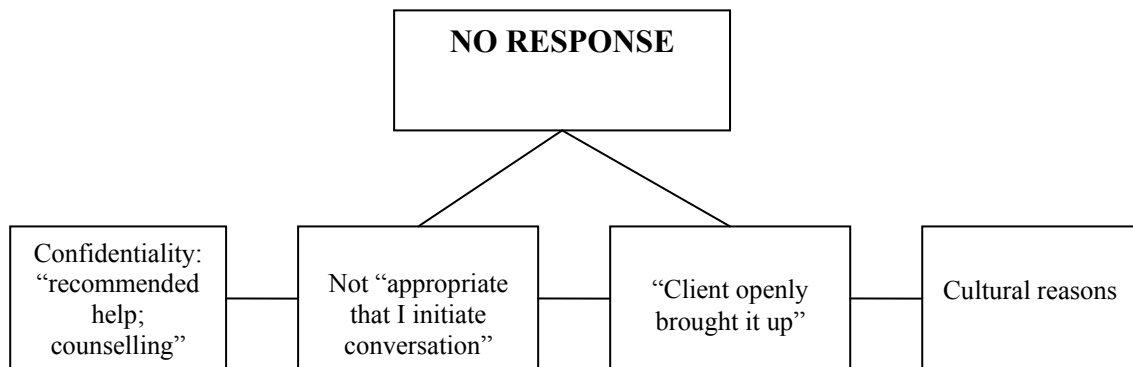
Diagram 5. Responding to victim/survivors in dental practice



Inhibitors to responding to victim/survivors

Some participants (4) who did not respond to victim/survivors highlighted the following reasons illustrated in Diagram 6.

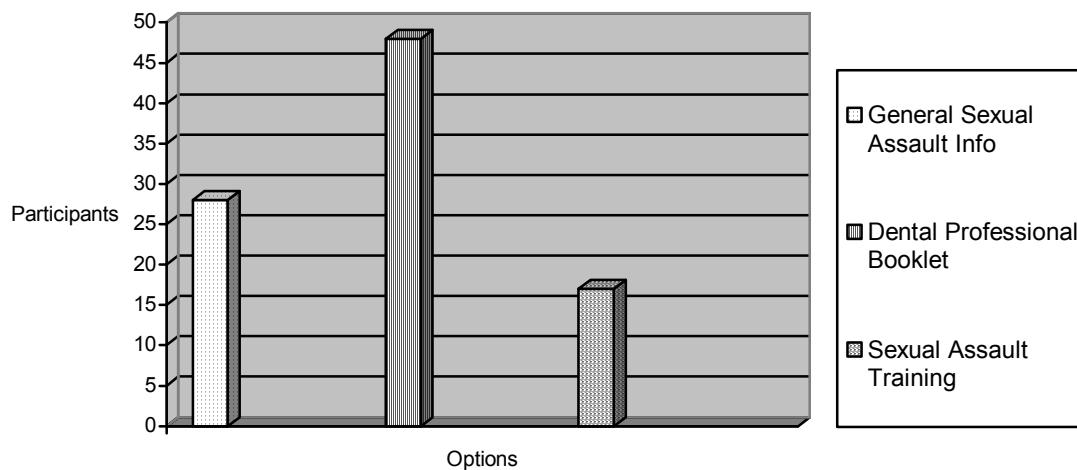
Diagram 6. Inhibitors to responding



Beneficial tools to assist dental professionals in working with adult survivors

Participants were given three suggestions to assist their working with adult survivors; general sexual assault information, a dental professional's specific booklet and/or sexual assault training. Graph 13 demonstrates the preferences indicated by dental professionals.

Graph 13. What do dental professionals need to facilitate better response to victim/survivors



Recommendations to support dental professionals in improved ways of working with victim/survivors

Participants noted that they would like to see a variety of changes implemented to equip them with knowledge that will benefit dental treatment given to victim/survivors of sexual assault. A strong response for awareness and discussion within the dental professional community was evident as one participant requested that:

“As a society, let’s talk about it more”

One of the most common suggestions was for information, as one participant stated:

“This is the first time in over 20 years of practice that this topic has been addressed.”

Additionally, dental professionals felt the need for education at both a tertiary and professional development level as many were:

“Aware of it (sexual assault) as a serious issue but not how it affects dental treatment.”

Table 5 demonstrates the varied recommendations contributed by dental professional participants.

Table 5. Recommendations to Support Best Practice

Issue	Recommendation
<i>Raise Awareness</i>	<ul style="list-style-type: none"> - “make us aware that there are things we need to be aware of” - “public and professional awareness of long term consequences for victims”
<i>Information</i>	<ul style="list-style-type: none"> - “specific information on how to handle those patients” - “More information and resources to be made available through my Association (DHAA).” - “general information on sexual assault” - “information on how to recognise signs and symptoms, mannerisms of survivors” - “dental professionals specific booklet” - “more knowledge on the subject referring to oral

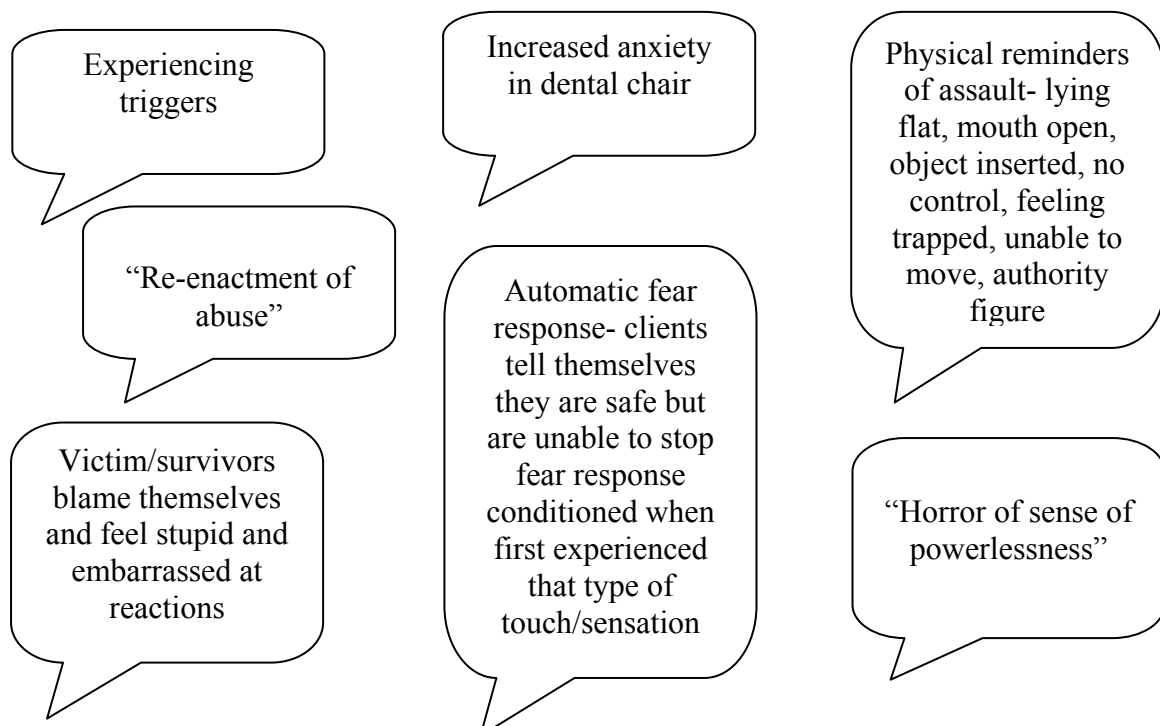
	<p>complications”</p> <ul style="list-style-type: none"> - “Information about ‘what is a survivor of sexual assault?’” - “information seminars” - “Information for risk assessment of these individuals so we know what to look for. How as practioners, to discuss the issues with suspected victims.”
<i>Tertiary Education</i>	<ul style="list-style-type: none"> - “a unit during study at uni” - “introduction of sexual assault training, general information and a dental professionals specific booklet in BDSC and BDHT courses”
<i>Training</i>	<ul style="list-style-type: none"> - “continuing education regarding this issue” - “contact DHAA about a continuing education component at a seminar” - “education of professionals; ‘lecture series’” - “continued education to DHAA via informed persons delivering lectures on this subject” - “Script on how to bring up the conversation and what to ask; steps to then take to help my patient(s).” - “An education course to advise us of what to look for and treatment required.” - “education on relevance- for instance, if close contact with patient in the dental chair affects the survivor” - “child and adult protection seminars etc, on what and how to identify signs and symptoms”
<i>Legal Protection</i>	<p>“details of legal protection for professionals”</p>
<i>Professional Support</i>	<ul style="list-style-type: none"> - “details of referrals for victims” - “presentation at Dental Hygiene Conference or article published in the Dental Hygiene Journal” - “chance to contact a counsellor”

Counsellor/Advocate Anecdotal Evidence

Counsellor/Advocates from both SECASA and other CASA regions took part in providing anecdotal evidence for the research. Counsellor/Advocates work with both recent and past sexual assault victim/survivors in crisis care and ongoing counselling at various locations throughout Victoria.

Generally, counsellor/advocates claimed that clients sometimes discuss oral health issues when posed with a question such as “How has it (assault) had an impact on your life?” Additionally, it was also evident from the responses that sometimes victim/survivors do not understand why they may be terrified and fearful of going to the dentist. In contrast, many victim/survivors do make a correlation between the assault and their fear of dental treatment. One counsellor/advocate who had an approximate caseload of 24 victim/survivors claimed that 6 experience difficulties with dental treatment and approximately 4-5 of these clients refuse to access treatment. The participant discussed how the experiences of these victim/survivors were further compounded by financial difficulties leaving many “working class women toothless.” Counsellor/Advocates identified the following oral health issues shared with them by their clients:

- Memories & Triggers



- Pain

Experiencing pain and needing a lot of anaesthetic

Fear anticipated due to pain associated with dental visits

Need to have invasive procedures

- Dental Attendance

Dental avoidance behaviour

Put off dental visits or don't attend at all

- Stress

Can be more stressful when oral assault involved

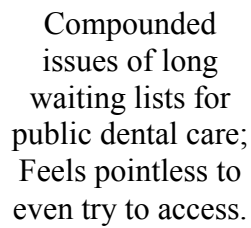
- Information

Need explanation of procedures and warm/friendly association

- Dissociation

Power of dissociation can act as a coping mechanism for some victim/survivors

- Cost & Waiting List



Compounded
issues of long
waiting lists for
public dental care;
Feels pointless to
even try to access.

Additionally, the issue of vicarious trauma was highlighted by counsellor/advocates who found that at times their own experiences of going to the dentist was impacted by the trauma that was shared with them as part of their work and occurred as flashbacks of the oral assault of their clients.

THEMES

“...even the acknowledgement of the reality of the abuse (sexual assault) can profoundly shift the attitudes of both patient and professional...the clinician is then able to sympathise with the patient’s effort to cope with overwhelming circumstances...”

(Chu & Dill, 1990, pg. 891)

This section provides a summary of the pertinent issues emerging from the findings drawn from the responses of victim/survivors and dental professionals. Data collected from counsellor/advocates will be used to provide additional evidence where appropriate.

Victim/Survivors Experiences

Demographics

- Impact of socio-economic factors on victim/survivors accessing dental treatment causing a compounded affect with dental fear and can result in a defeatist attitude.

The Circumstances of Sexual Assault

- Prevalence of CSA amongst the sample population.
- High degree of disclosure

Dental Attendance

- Attendance influenced by oral emergencies and pain.
- Impact of affordability of dental treatment and socio-economic factors.

The Impact of Sexual Assault on Dental Experiences

- The increased sensitivity of mouth area causing difficulties for dental treatment.
- Role of triggers in dental setting due to some parallels between dental treatment and assault.
- Impact of gender of dentists and 'invasion' of personal boundaries.
- Dental chair and procedures- lack of control and power.
- Dental professional = authority figure
- Impact of issues involving trust between victim/survivor and dental professional.
- Anticipation of pain

Factors Inhibiting Dental Treatment

- Fear
- Powerlessness
- Anxiety
- Stress
- Dental cost and victim/survivor finances
- Public waiting lists

Oral Health Issues

- Majority of victim/survivors with poor oral health status.

Experiences of Oral Health Care and Treatment

- Pain

- Triggering of uncontrollable reactions
- Fear and anxiety
- Feeling vulnerable in dental chair
- Shame over reactions
- Difficulty of having dental instruments in mouth
- Cost and financial difficulties
- Varied negative reactions: panic attacks, dissociation, flashbacks, crying, difficulty opening mouth, irritability, loss of voice.

Feeling Safe- Recommendations

- Feeling protected and not alone
- Less invasion of personal space
- Having distractions
- Dental professional awareness of sexual assault and possible impacts on oral health and dental treatment
- Better information, explanation and communication about procedures and what to expect.
- Having greater power and control through: negotiating breaks or stop cues, given options about procedures, or simply being asked permission before action taken.
- No pain
- Interpersonal skills; sensitivity and support

Issues for the Dental Industry

Awareness of Sexual Assault and the Impacts on Oral Health

- Limited awareness of the impacts of sexual assault on oral health and implications for dental practice.

Responding in the Dental Setting

- Some confusion over why and how to respond to victim/survivors as dental patients.

Suggestions for Best Practice

- Need for information, education, training and support.

CONCLUSIONS

Victim/Survivor Experiences

Demographics

- Although male participants took part, greater proportion of sample was women.
- Greatest percentage of participant's was aged between 18-24 years of age.
- Most victim/survivors resided in Australia.
- 40% of sample comprised low income groups (unemployed and students) and 19% were employed in healthcare professions.

Circumstances of Sexual Assault

- No participants from the sample were victim/survivors of a recent sexual assault; thus all experienced CSA with the highest frequency between the ages of 5-12 years of age. As a result, it is paramount that a study be conducted to examine the impacts of CSA on children's dental experiences.
- 64% of victim/survivors disclosed sexual assault between 5-17 years of age. Disclosure was responded to a variety of ways by different members of the community.

Dental Attendance

- Equal amounts of participants attended the dentist either 'monthly', 'yearly' or 'not at all'. The greatest proportion of victim/survivors indicated that they seek dental treatment depending on when required due to emergency or pain.

The Impact of Sexual Assault on Dental Experiences

- Larger percentage of sample felt that sexual assault had impacted on their willingness to seek dental treatment.

- Participants felt that sexual assault impacted on their dental experiences due to:
 1. Mouth area- increased sensitivity
 2. Parallels to assault caused triggers such as anxiety/panic attacks, flashbacks, uncontrollable reactions (crying, gagging), gender of dentist (male), lack of power and control, invasion of personal space, reclining of dental chair.
 3. Fear

Factors Inhibiting Dental Health Care and Treatment

- Fear due to parallels with assault and resulting triggers.
- Fear due to instruments in mouth
- Fear due to anticipation of pain
- Costs of visiting dentist
- Public waiting lists for dental treatment
- Powerlessness as a patient with an authority figure

Gender Issues

- Although dental professional gender was expected to be an issue, figures indicated otherwise. For some victim/survivors it is evident that they prefer a female dental professional for added protection and feelings of safety. What is clear is the fact that regardless of gender, participants want dental professionals who are sensitive, non-authoritarian, non-judgemental, caring and who have an awareness of the possible impacts of sexual assault.

Oral Health Issues

- Unsatisfactory levels of oral health (poor to very poor)
- Oral health problems were experienced by all participants with most common including cavities, sensitive teeth, tooth ache and difficulty chewing food. Other problems listed by victim/survivors were in regards to wisdom teeth, teeth cracking and falling apart, jaw problems and need for root canal.

Dental Experiences

- Important to highlight that some victim/survivors stated that their dental experiences were 'fine' and 'ok' but the majority shared traumatic experiences due to difficulties with having instruments inserted into the mouth, uncontrollable reactions in dental chair, pain, fear and anxiety. This commonly resulted in triggering dissociation, flashbacks and anxiety/panic attacks leaving the participant feeling ashamed from their reactions to dental treatment and the status of their teeth.
- Victim/survivors underwent many difficulties in the dental setting due to the lack of control and power that they had during procedures and the lack of awareness from dental professionals.

Disclosing Sexual Assault to Dental Professionals

- Important to draw attention to concerns around disclosure and responsibility of dental professionals in this context. It is evident that victim/survivors do not necessarily want to disclose past sexual assault to dental professionals and those dental professionals often do not feel like it is appropriate to ask their patient about these concerns.

In this situation it is paramount to remember that choice is what is most needed to allow victim/survivors to feel more in control of their experience. This may include developing trust and opening up a space where dialogue can take place about what the patient finds most uncomfortable without pressure to disclose sexual assault. It may include new strategies to enable the patient to talk about sexual assault if they choose; this could include an optional tick box question on the patient history or a space to write about concerns and past dental experiences.

What is obvious is that disclosure is not necessary but awareness of the impacts of sexual assault on oral health is. This awareness may allow dental professionals to recognise signs that a patient may be a victim/survivor of sexual assault allowing them to support the patient in appropriate ways.

Feeling Safe- Recommendations

- Victim/survivors want improvements that will encourage their feelings of safety in the dental setting; involving themes of aesthetics/distractions, information, communication, not being alone, understanding and awareness, communication and more control/power through having breaks or developing cues/signals so that they can stop the procedure.
- Participants also indicated that dental professional's interpersonal skills also contributed to their feelings of safety. Due to the status of their oral health they don't want to be ridiculed for the condition of their teeth and require sensitivity to the reactions that they might experience during dental treatment.

Dental Industry

- Although the majority of dental professionals who participated had an understanding that sexual assault is not an unusual occurrence and rape is not rare, a small proportion indicated otherwise, calling for a need to promote further education within the dental industry about the prevalence of sexual assault within the community.
- More awareness needs to be raised within the dental community about the impact of sexual assault on oral health and the indicators that may alert them to the need for different responses and approaches to these patients.
- Need for discussion about awareness and strategies for best practice versus pressure for disclosure.
- Support and assistance in form of specific dental professional's booklet with opportunities to access general sexual assault information and training.
- Additional support strategies requested by dental industry include: ongoing education and training in tertiary courses and professional development, consciousness raising, professional support and presentations at seminars and conferences.

Counsellor/Advocates

- Counsellor/Advocates who work with victim/survivors of sexual assault also felt impacts of their client's experiences through secondary trauma occurring as flashbacks during their dental treatment.

LIMITATIONS

To increase validity and understand the constraints of the research project, it is necessary to explore key limitations of the study:

- Although it would be ideal to include a control group in the data collection for comparative purposes, no control group was included due to time limitations in selecting appropriate candidates and gaining the necessary information.
- Using a dental anxiety scale such as Corah's Dental Anxiety Scale (CDAS), would provide more scientifically accurate results using dental terminology. The Corah's Dental Anxiety Scale is a more commonly used instrument to measure dental fear (Willumsen, 2004) and would allow comparison between this study and other similar studies examining dental fear and anxiety in victim/survivors of sexual assault.
- Self reporting (Hays & Stanley, 1996, pg. 72) measures can be limiting as they require participants to understand and reflect on what they are reporting (e.g. Dental problems) where this is not always possible.
- The lack of previous research into the dental experiences of male victim/survivors of sexual assault was limiting. The literature review conducted was not inclusive of male participants which resulted in some inconsistencies between this research project and similar studies.
- As this is the first time a study of this kind has been undertaken in Australia, awareness levels around the issue are not high. For many victim/survivors,

this has been the first time they have become aware of the link between sexual assault and oral health issues; previously they have not understood their reactions to dental treatment and their inability to attend the dentist on a regular basis due to fear and anxiety. This has had a limiting affect in regards to the sample population of victim/survivors who participated in the anonymous online survey. For other victim/survivors it has been an opportunity to find their voices to articulate the difficulties that they recognise and experience.

- Although the victim/survivor online survey was designed to facilitate choice for participants, and was a successful vehicle in allowing them to detail subjective experiences, it also had the following limitations:
 - Participants were able to submit the online survey without providing answers to all questions. Due to the sensitive nature of the issues and questions which explored sexual assault it was important to give participants the choice to not answer questions which made them feel uncomfortable. Furthermore, this posed a limitation in the data collection stage where the researcher had a number of pivotal questions which had significant percentages of no response indicated.
 - Utilising an online survey is beneficial in maintaining anonymity and facilitating fast and easy access but also was limiting as answers could not be followed up or clarified with the participant when further detail was required.
- Time constraints posed some of the biggest limitations in regards to the sample of dental professionals which responded to the research study. Despite receiving much support from the Dental Hygienists Association and other members of the dental community, some peak bodies were less receptive. As a result of being unable to comply with the organisational demands on

accepting research of this nature (time constraints), further consciousness raising and marketing of the research was unattainable, which may have attracted a larger sample of dental professionals.

RECOMMENDATIONS

43 male and female victim/survivors shared their dental experiences with this study conveying a strong emphasis on recommendations that they envisaged would assist their feelings of safety in the dental setting. 50 dental professionals revealed their levels of awareness of sexual assault and how they perceived sexual assault to impact (or not impact) their practice, collectively revealing the changes they feel would better equip them in providing best practice dental treatment to victim/survivors of sexual assault. Furthermore, counsellor/advocates contributed extra support through the anecdotal evidence they imparted to the research, adding further weight to the recommendations outlined by victim/survivor participants.

This section aims to delineate the recommendations in two parts; improving victim/survivor's dental experiences and providing supportive approaches for dental professionals. Despite this aim its biggest challenge is to advocate for one larger purpose; greater awareness and better dental care and treatment for an already disadvantaged and silenced group; adult victim/survivors of sexual assault.

Improving Victim/Survivors Dental Experiences

It is recommended that:

- Awareness is increased amongst victim/survivors regarding the possible impacts of sexual assault on their oral health. This should include:
 - An educational/resource pamphlet that outlines the importance of oral health, the impacts of poor oral health and the potential effects of sexual assault on oral health. It should also include empowering

practical suggestions for alleviating negative reactions and support in accessing dental health care and treatment.

- An awareness poster for victim/survivors that outlines the major impacts of sexual assault on oral health and dental treatment.
- Awareness is amplified amongst the dental industry regarding the reality of sexual assault in the community and the possible impacts this may have on the oral health of their patients who may be victim/survivors. This should include:
 - Access to this research paper.
 - The development of a dental professional's specific booklet outlining the prevalence of sexual assault and potential impacts on their patients. It should include a list of symptoms which may indicate that a patient is a victim/survivor, a list of practical suggestions to facilitate supportive responses, information on legal protection and support/referral details for Centres Against Sexual Assault.
 - Awareness advertisements in reputable dental journals/magazines targeting professionals within the industry.
- Dental Professionals are encouraged to consider new ways of best practice that may facilitate feelings of safety for victim/survivors of sexual assault. These should include but are not limited to:
 - Non-authoritarian, non-judgemental approaches to victim/survivors.
 - Encouraging victim/survivors to have a trusted person with them during dental visits and procedures.
 - Consider including a general question on patient history regarding dental fear and past experiences/reactions. Can be used as a preliminary filter alerting the professional to need for awareness about patients reactions and possible responses or ways of supporting.

- Keeping treatment room doors open to increase safety and protection.
- Consider implementing changes to aesthetics of surgery that may provide distractions for anxious, fearful patients who may be victim/survivors (eg. Calming/relaxation music, fish tanks, colourful prints on walls, TV, having blinds open to let in daylight).
- Use disposable earphones for listening to music to limit distractions for other staff and/or patients.
- Provide information to all patients prior to appointment about what to expect when visiting dentist and explanation of options and procedures.
- Communicate patient's options about dental treatment. Give the victim/survivor choice and always 'inform before perform'.
- Ask permission before doing anything and always explain what you are doing.
- Have a quick 'meet and greet' 5 minute appointment prior to treatment appointment with patients who are fearful and anxious.
- Develop signals or cues with patients to allow them to indicate when they need to stop the treatment and procedure. Revise these on a regular basis and always follow through with the promise to stop.
- Check-in with the patient on a regular basis.
- Limit body contact and time spent leaning in over the patient.
- Negotiate the reclining angle of the chair or proceed in small increments.

- Limit the patient's time in the dental chair and give the patient breaks as requested.
- Provide adequate pain relief, when appropriate, upon request.
- Respond to patient's distress in an appropriate and sensitive way.
- Where possible, refrain from discussing the benefits of pain to prevent patient being triggered by flashbacks of abuse situation.
- If sensitive to latex smells emitted by gloves, where possible use an alternative.

Strategies in Supporting Dental Professionals

It is recommended that:

- Awareness is increased through development and distribution of dental professional's specific booklet.
- Discussion is facilitated within and between the different professional associations.
- Dental professionals feel supported in implementing best practice suggestions for treating victim/survivors and have access to consult with counsellor/advocates and other support/referral options.
- Continuing information seminars for dental professionals outlining sexual assault prevalence, possible impacts on oral health, risk assessment and sensitive response suggestions.

- Dental professionals increase their own awareness to facilitate best practice that is supportive of victim/survivors without necessarily obtaining a disclosure.
- Additional undergraduate and post-graduate education and training are clearly required to assist students studying within all levels of dentistry of the specific issues for victim/survivors of sexual assault who access oral health care and treatment.
- Educational presentation at dental professional seminars/conferences to continue professional development regarding the impacts of sexual assault on oral health.

BIBLIOGRAPHY

- ABC News, Friday 3rd August, 2007 ‘Survey finds Australia in dental care “crisis”’ at www.abc.net.au
- About.com (2007) ‘What is a periodontist?’ (www.dentistry.about.com)
- Abrahamsson, K.H., Berggren, U. & Carlsson, S.G. (2000) ‘Psychosocial aspects of dental and general fears in dental phobic patients’ in *Acta Odontol Scand*; 58: 37-43.
- Abrahamsson, K.H., Berggren, U., Hallberg, L. & Carlsson, S.G. (2002) ‘Dental phobic patients’ view of dental anxiety and experiences in dental care: a qualitative study’ in *Scand Journal of Caring Science*; 16: 188-196.
- ABS (2004) *Sexual Assault in Australia: A Statistical Overview*. Australian Bureau of Statistics.
- ABS (2005) *Crime and Safety Australia*. Australian Bureau of Statistics
- ADTA (2007) ‘About the ADOHTA’ at <http://www.adta.net.au/>
- AHMAC (2001) *Oral Health of Australians: National Planning for Oral Health Improvement Final Report*. Australian Health Ministers’ Advisory Council; Steering Committee for National Planning for Oral Health, South Australia Department of Human Services.
- AIHW (2002) *National Dental Telephone Interview Survey*
- American Psychiatric Association (2000) *Diagnostic & Statistical Manual of Mental Disorder: DSM-IV-TR*. 4th edn. USA.
- Armfield, J. M. (2006) ‘Cognitive Vulnerability: A model of the etiology of fear’ in *Clinical Psychology Review*; 26: 746-768.
- Armfield, J. M., Spencer, A. J. & Stewart, J. F. (2006) ‘Dental fear in Australia: who’s afraid of the dentist?’ in *Australian Dental Journal*; 51: 1
- Aartman, I., De Jong, A. & Van der Meulen, M. R. (1997) ‘Psychological characteristics of patients applying for treatment in a dental fear clinic’ in *European Journal of Oral Science*; 105: 384-8.
- Beck, J.D., Pankow, J., Tyroler, H.A. & Offenbacher, S. (1999) ‘Dental infections and atherosclerosis’ in *American Heart Journal*; 138: 528-33.
- Berggren (1984)
- Berkowitz, R.J. (2003) ‘Acquisition and transmission of mutans streptococci’ in *Journal Calif Dent Assoc*; 31: 135-8.

- Boggess, K.A. & Edelstein, B.L. (2006) 'Oral health in women during preconception and pregnancy: implications for birth outcomes and infant oral health' in *Maternal Child Health Journal*; 10: 169-174.
- Bonanno, G. A., Noll, J. G., Trickett, P. K., Keltner, D., Putnam, F.W & LeJeune, J. (2002) 'When the face reveals what words do not: facial expressions of emotion, smiling, and the willingness to disclose childhood sexual abuse' in *Journal of Personality & Social Psychology*; 83(1): 94-110.
- Bynes, J.A. (1993) 'The emotional aspects of dentistry' in *Dental Economics*; 83(5): 74.
- Bynes, J.A. (2003) 'Study links childhood incidence of sexual abuse with dental fears' in *Dentistry Today*; 22(12): 26-8.
- Broadbent, J. M., Thomson, W.M. & Poulton, R. (2006) 'Oral health beliefs in adolescence & oral health in young adulthood' in *Journal of Dental Research*; 85(4): 339-43.
- CASA House (1990)
- Caulfield, P.W., Cutter, G.R. & Dasanayake, A.P. (1993) 'Initial acquisition of mutans streptococci by infants: evidence for a discrete window of infectivity' in *Journal of Dental Research*; 72: 37-45.
- Chu, J. & Dill, D. (1990) 'Dissociative symptoms in relation to childhood physical and sexual abuse' in *American Journal of Psychiatry*; 147: 887-892.
- Courtois (1993)
- DHA AVB (2007) 'What is a dental hygienist?' at <http://www.dhaavb.com.au>
- DPBV (2007) Telephone conversation (July 2007-07-17)
- Esposito, N. (2006) 'Women with a history of sexual assault: health care visits can be reminders of a sexual assault' in *American Journal of Nursing*; 106(3): 69-73.
- Fergusson, D. M & Mullen, P. E (1999) 'Childhood Sexual Abuse: Evidence Based Perspective', in *Developmental Clinical Psychology and Psychiatry*, vol. 40.
- Fleming, J., Mullen, P.E., Sibthorpe, B. & Bammer, G. (1999) 'The long term impact of childhood sexual abuse in Australian women' in *Child Abuse & Neglect*; 23: 145-59.

- Hakeberg, M., Berggren, U. & Grondahl, H.G. (1993) 'A radiographic study of dental health in adult patients with dental anxiety' in *Community Dentistry and Oral Epidemiology*; 21: 27-30.
- Häglin, C., Hakeberg, M., Ahlqwist, M., Sullivan, M. & Berggren, U. (2000) 'Factors associated with dental anxiety and attendance in middle-aged and elderly women' in *Community Dentistry and Oral Epidemiology*; 28: 451-60.
- Hall & Lloyd (1993)
- Harford, J., Ellershaw, A. & Stewart, J. (2004) 'Access to dental care in Australia' in *Australian Dental Journal*; 49(4): 206-8.
- Hays, K. F. & Stanley, S. F. (1996) 'The impact of childhood sexual abuse on women's dental experiences' in *Journal of Child Sexual Abuse*; 5; 65-74
- Hendricks-Matthews (1993)
- Herman, J. (1992) *Trauma & Recovery*. Basic Books, New York.
- IVAWS (2004) *Women's experiences of male violence : findings from the Australian component of the International Violence Against Women Survey (IVAWS)* Australian Institute of Criminology
- Kamin, V. (2006) 'Fear, stress and the well dental office' in *Northwest Dentistry- Journal of the Minnesota Dental Association*; 85(2).
- Kohler, B., Andreen, I. & Jonsson, B. (1984) 'The effect of caries-preventive measures in mothers on dental caries and the oral presence of the bacteria *Streptococcus mutan* and lactobacilli in their children' in *Arch Oral Biol*; 29: 879-83.
- Kohler, B., Bratthall, D., & Krasse, B. (1983) 'Preventive measures in mothers influence the establishment of the bacterium *Streptococcus mutan* in their infants; in *Arch Oral Biol*; 28: 225-31.
- Leeners, B., Stiller, R., Block, E., Gorres, G., Imthurn, B., & Rath, W. (2007) 'Consequences of Childhood Sexual Abuse Experiences on Dental Care' in *Journal of Psychosomatic Research*; 62: 581-88
- Levore, D. (2003) *Non-reporting and hidden recording of sexual assault: an international literature review*. Canberra: Commissioners Office of the Status of Women
- Locker, D., Thomson, W.M. & Poulton, R. (2001) 'Psychological disorder, conditioning experiences, and the onset of dental anxiety in early adulthood' in *Journal of Dental Research*; 80(6): 1588-1592.

- Masters, C. (2007) '200,000 on dental waiting list' in *The Daily Telegraph* 29/06/07.
- Moore, S., Ide, M., Coward, P.Y., Randhawa, M., Borkowska, E., Baylis, R. & Wilson, R.F. (2004) 'A prospective study to investigate the relationship between periodontal disease and adverse pregnancy outcome' in *British Dental Journal*; 197: 251-8.
- Milgrom, P. (1995) *Treating Fearful Dental Patients: A Patient Management Handbook* University of Washington, cited in Kamin (2006).
- Milgrom, P., Weinstein, P. & Getz, T. (1995) *Treating Fearful Dental Patients: A Patient Management Handbook*. University of Washington
- Moore, R., Brødsgaard, I. & Rosenberg, N. (2004) 'The contribution of embarrassment to phobic dental qualitative research study' in *BMC Psychiatry*; 4(10).
- Morrison, Z. (2007) 'Feeling heavy: Vicarious trauma and other issues facing those who work in the sexual assault field' in *ACSSA Wrap*, No. 4, September. Australian Institute of Family Studies
- Mullen (1993)
- Department of Human Services (2007) 'About child abuse?' Victorian Government at www.office-for-children.vic.gov.au/child_protection/abuse.
- Office for Victims of Crime (2004) 'Barriers to Intervention Reported by Dental Professionals' in *Family Violence: An Intervention Model for Dental Professionals*. United States Department of Justice.
- Okuda, K. & Ebihara, Y. (1998) 'Relationships between chronic oral infectious diseases and systemic diseases' in *Bull Tokyo Dent Coll*; 39: 165-74.
- Pearlman, L., & Saakvitne, K.W. (1995) 'Vicarious traumatization: the impact on therapists who work with sexual offenders' in *Trauma, Violence & Abuse: A Review Journal*; 8(1): 67-83.
- Riessman, C. K. (1994) *Qualitative Studies in Social Work Research*. Sage Publications, CA.
- Roberts, S. J., Reardon, K. M. & Rosenfeld, S. (1999) 'Childhood sexual abuse: surveying its impact on primary care' in *Association of Women's Health, Obstetrics & Neonatal Nurses*; 3(1): 39-45.
- Robin, O., Alaoui-Ismaili, O., Dittmar, A. & Vernet-Maury, E. (1998) 'Emotional responses evoked by dental odors: an evaluation from autonomic parameters' in *Journal of Dental Research*; 77(8): 1638-1646.

- Rothschild, B. (2000) *The Body Remembers: Unifying Methods & Models in the Treatment of Trauma and PTSD*. W.W Norton & Company, N.Y.
- Sanders, A.E., Slade, G.D., Carter, K.D. & Stewart, J.F. (2004) 'Trends in prevalence of complete tooth loss among Australians, 1979-2002' in *Australian & New Zealand Journal of Public Health*; 28(6): 549-54.
- Scannapieco, F.A. (1998) 'Position paper of the American Academy of Periodontology: periodontal disease as a potential risk factor for systemic diseases' in *Journal Periodontal*; 69: 841-50.
- Shuller, A.A., Willumsen, T. & Holst, D. (2003) 'Are there differences in oral health & oral health behaviour between individuals with high and low dental fear?' in *Community Dentistry & Oral Epidemiology*; 31: 116-21.
- Slade, G.D., Ghezzi, E.M., Heiss, G., Beck, J.D., Riche, E. & Offenbacher, S. (2003) 'Relationship between periodontal disease and C-reactive protein among adults in the Atherosclerosis Risk in Communities study' in *Arch Intern Med*; 163: 1172-9.
- Stalker, C. A., Russell, B. D., Teram, E. & Schachter, C. L. (2005) 'Providing dental care to survivors of childhood sexual abuse: treatment considerations for the practitioner' in *Journal of American Dental Association*; 136: 1277-81.
- Steinberg, M. (1994) *Systemising dissociation: Symptomology and diagnostic assessment*. In D. Spiegel (Ed.), *Dissociation: Culture, mind and body*.
- Teram, E. (1999) 'Opening the doors to disclosure: childhood sexual abuse survivors reflect on telling physical therapists about their trauma' in *Physiotherapy*; 85: 88-97.
- Masters, C. (2007) '200 000 on dental waiting list' in *The Daily Telegraph*, June 29. www.new.com.au/dailytelegraph
- Unell, L., Soderfeldt, B., Halling, A. & Birkhed, D. (1999) 'Explanatory models for clinically determined and symptom-reported caries indicators in an adult population' in *Acta Odontol Scand*; 57: 132-8.
- Vassend, O. (1993) 'Anxiety, pain and discomfort associated with dental treatment' in *Behav Res Ther*; 31: 659-66.
- Victorian Government (2005) *Children, Youth & families Act 2005*.
- Victoria Legal Aid (2004) *Sexual Assault: the law, your rights*. Victoria Legal Aid, Community West & CASA Forum, Melbourne.

- Edward, A., Walker, M.D., Milgrom, P.M., Weinstein, P., Getz.T. & Richardson, R. (1996) 'Assessing abuse & neglect and dental fear in women' in *Journal of the American Dental Association*; 127: 485-90.
- Weinberg and Levine (1980)
- Willumsen, T. (2001) 'Dental Fear in Sexually Abused Women' in *European Journal of Oral Science*; 109: 291-6
- Willumsen, T. (2004) 'The Impact of Childhood Sexual Abuse on Dental Fear' in *Community Dentistry and Oral Epidemiology*; 32: 73-9
- Young, T.K. & Katz, A. (2001) 'Survivors of sexual abuse: clinical, lifestyle and reproductive consequences. *CMAJ*; 159: 329-334.

APPENDIX 1

Victim/Survivors Survey

Sexual Abuse and Oral Health Survey

A Survey Exploring the Impacts of Sexual Abuse on Oral Health for Victim/Survivors.

The following brief survey asks you some questions about your experience of dental treatment. You don't have to tell us who you are or go into any detail about what happened to you in relation to the assaults.

It takes about 10-15 minutes and you can 'submit' it on-line straight away. We are hoping that the findings will help to gain more information about affect of sexual abuse on oral health and assist in providing information for survivors and dentists on the difficulties experienced and how dental experiences can be improved for victim/survivors.

1.
 - a) Gender
 - b) Age
 - c)Country of Residence_____

If Australia please indicate if in State of Victoria

d)Occupation

- 2 a) How old were you at the age of first assault?
 - b) Did you tell anyone?
If 'yes' how old were you when you told and what was the outcome?
3. How often do you attend the dentist?
4. What has inhibited you from receiving dental care in the past?
5. Do you prefer a male or female dentist?
6. How would you rate your current oral health?
7. Do you have any of the following oral health problems? Tooth loss, sore or infected gums (gum disease), bad breath, cavities, loose teeth, toothache, abscess, sensitive teeth, difficulty chewing, other. If 'other' please specify
8. What have your dental experiences been like in the past?

9. Has sexual assault impacted on your willingness to attend a dentist? if 'yes' please indicate how
10. Have you experienced any negative reactions during dental treatment? If 'yes' please list your reactions.
- 11 a) Have you ever told your dentist about your prior assault history?
 - b) Has a dentist ever asked you about your prior assault history?
 - c) If you answered 'no' to the above questions, Would you like your dentist to know about your prior assault history?
12. What would help you feel safe:
 - a) In waiting room
 - b) In dentists chair
 - c) In your relationship with dental staff during your appointment
 - d) during the procedure
13. If your dental experience was beneficial, safe and positive what happened or would need to happen to make it different?
14. Have you experienced any significant health issues? If 'yes' please specify

Please contact your regional sexual assault service if you would like to talk to about issues that have arisen from completing this survey.

*For Contact numbers within Australia
www.serviceseeker.com.au*

*Victorian Contact numbers
Sexual Assault Crisis Line- 95942289
South East Centre Against Sexual Assault- 99288741*

APPENDIX 2

Awareness Leaflet

Sexual Assault & Dental Health Care Survey



Take part in a new anonymous online research survey looking at the impact of sexual assault on victim/survivors and the ways they experience dental health care.

Have your say at www.secasa.com.au (Go to 'whats on' and click on the link)

APPENDIX 3

Dental Professionals Survey

**Impacts of Sexual Assault on the Oral Health of
Adult Survivors Survey:
*Exploring Dental Professionals Awareness***

- 1) Are you a (please circle)
- | | | | |
|---------------------|--------------------------|--------------------|--------------------------|
| Dentist | <input type="checkbox"/> | Dental Prosthetist | <input type="checkbox"/> |
| Dental Periodontist | <input type="checkbox"/> | Dental Therapist | <input type="checkbox"/> |
| Orthodontist | <input type="checkbox"/> | Dental Assistant | <input type="checkbox"/> |
| Dental Hygienist | <input type="checkbox"/> | Dental Nurse | <input type="checkbox"/> |
| other | <input type="checkbox"/> | | |
- if 'other' please specify _____
- 2) Please answer true or false for the following statements:
- a) Sexual assault is an unusual occurrence and rape is rare _____
- b) Childhood Sexual Assault (CSA) has no long term effects _____
- c) Health professionals have a responsibility to respond appropriately to survivors of sexual assault _____
- 3) Are you aware of the impact of sexual assault on the oral health of adult survivors?
- _____
- If 'yes' please list the impacts you are aware of _____
- _____
- _____
- 4) Have you ever wondered whether a patient in your own practice may have been a survivor of sexual assault? _____
- a) If 'yes', please briefly indicate what led you to believe this. _____
- _____
- a) List any steps you took with the patient _____
- _____
- b) If you took no steps, please indicate what inhibited you from doing so.
- _____
- _____
- 5) Please indicate if you would find it beneficial to receive any of the following to assist you in working with adult survivors of sexual assault?
- a) general sexual assault information
- b) dental professionals specific booklet
- c) sexual assault training
- 6) What changes would you like to see implemented to equip you with knowledge to benefit dental treatment given to survivors of sexual abuse?
- _____
- _____

- 7) Please email me if you would like to be added to our online resource list for victim/survivors at www.secasa.com.au.

*Thank you for your time in completing this survey
For more information or any queries about your participation in this research project
please contact Allison Payet at **South Eastern Centre Against Sexual Assault** on
9928 8741 or email: allison.payet@southernhealth.org.au*

APPENDIX 4

Counsellor/Advocate Questionnaire

***COUNSELLOR/ADVOCATE QUESTIONNAIRE
ANECDOTAL EVIDENCE***

1. In your experience, approximately how many clients have discussed dental issues or difficulties experienced when going to the dentist _____

2. What have generally been the issues that victim/survivors have encountered when going to the dentist _____

3. Please list any quotes that you can provide _____

4. Please feel free to include any other relevant information

APPENDIX 5

Email evidence

Australia

1)

17/07/07

“It’s an interesting area and there is now at least a few studies that have been published which look at the link between sexual abuse and dental fear/oral health. If anything, I would have thought that **the vulnerability-related perceptions related to receiving dental care is even more acute in survivors of sexual abuse. Issues of control, predictability and danger would be of central and heightened concern for people who have been sexually abused, especially perhaps for those who have suffered childhood sexual abuse.** It really is a very interesting and largely unexplored area of research which I’d be happy to help with.”

2)

17/07/07

“The Victorian Dental Therapist Association (VDTA Inc.) is not aware of any regular training that is conducted for any dental professionals including dentists, dental therapists, dental hygienists, etc around sexual assault, except the occasional seminar on the oral manifestations of sexual assault in children. The Dental Hygienist Association of Australia (Victoria Branch) and the VDTA have actually put this topic on the proposed program of events for our combined conference to be held in Bendigo in November this year.

This sounds like a fantastic research project and I would love you to keep us informed of your progress and outcomes. **We as dental professionals often get caught up in looking for the signs right now, but never really stop to consider the ongoing impact this may have on people as they get older.** Could I suggest that when you are looking to develop a brochure, that you aim that at all dental professionals, not just dentists.”

3)

21/08/07

“I’m delighted to know that research is being undertaken on this topic. After many years of terrible experiences at dentists caused not only by the results of childhood abuse but by dentists who don’t know what to do with a person who ‘disappears while she is in the chair’.

After many years I have finally found a young female dentist who ‘works with me’.

United States

1)

09/08/07

“Whenever I do the dental intervention trainings we always talk about sexual assault and its relationship with oral health. When we discuss working with children, for example, we do talk about children and adults being fearful of being reclined in the dental chair and explain how that within the context of other non-verbal behaviours in the dental environment can alert dental professionals to the possibility of that child or adult having been orally penetrated. In addition, my dental colleague discusses, what would be disease states that could be observable in the oral area, such as yeast infections, STD’s etc.”

2)

09/08/07

“Sounds like interesting research you are doing, with products that will be useful to the field and victims. Thanks for your work! One differences I think you might see in dental interventions in sexual assault and abuse cases is that the focus would probably be more on the mouth/surrounding area versus the whole head and neck area. Not only would I want dental professionals to be aware of signs of trauma and infection to the moth cavity/area surrounding the mouth due to penetration and other sexual acts, but I would want them to **be aware that some individuals with histories of sexual abuse/assault, whether the violence included oral penetration or not, may be very reluctant to go/fear going to the dentist because they may be triggered by the experience of being orally examined, having someone touching them, and having invasive treatments and feeling like they don’t have much control.**

Also, a sexual assault victim could have dental/oral problems that stem from sexual assault/abuse but are not directly related to the actual act (eg. **a victim who was orally sexually abused as a child may not brush her teeth because it reminds her of the assault and end up having major teeth decay. Or a stress reaction in the aftermath of an assault of grinding teeth may lead teeth/gum problems**). Most of my direct service work was with teen and adult sexual assault victims. Only a few that I worked with clearly needed dental/oral medical care due to injury related to a sexual assault (eg. lost tooth or lacerations inside mouth). But a good handful had significant medical problems that arose from multiple trauma they dealt with in their lives- they were often reluctant to have medical professionals touch them or felt these professionals would never understand, validate and be sensitive to their issues.”

APPENDIX 6

Cognitive Vulnerability Model of the etiology of fear and the process of fear elicitation

(Armfield, 2006)