

**PERCEPTIONS OF ACCESS TO PREVENTIVE ORAL HEALTH CARE AT A
COMMUNITY-BASED DENTAL HYGIENE CLINIC FOR WOMEN IMPACTED BY
THE CRIMINAL JUSTICE SYSTEM**

by

Kathleen Herlick

B.Sc., The University of British Columbia, 2017

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE

in

THE FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES
(Craniofacial Science)

THE UNIVERSITY OF BRITISH COLUMBIA
(Vancouver)

June 2019

© Kathleen Herlick, 2019

The following individuals certify that they have read, and recommend to the Faculty of Graduate and Postdoctoral Studies for acceptance, a thesis/dissertation entitled:

Perceptions of access to preventive oral health care at a community-based dental hygiene clinic for women impacted by the criminal justice system

submitted by Kathleen Herlick in partial fulfillment of the requirements for
the degree of Master of Science
in Craniofacial Science

Examining Committee:

Leeann Donnelly, Oral Biological and Medical Sciences
Supervisor

Mario Brondani, Oral Health Sciences
Supervisory Committee Member

Ruth Elwood Martin, School of Population and Public Health
Supervisory Committee Member

Kavita Mathu-Muju, Oral Health Sciences
Additional Examiner

Additional Supervisory Committee Members:

Supervisory Committee Member

Supervisory Committee Member

Abstract

Objective: Women impacted by the criminal justice system experience barriers accessing oral health care. In 2013, the Elizabeth Fry Society of Greater Vancouver (EFry) and the University of British Columbia implemented a dental hygiene clinic at EFry at which dental hygiene students provide preventive care to women and children. This study aimed to describe the population utilizing the clinic and identify clients' and EFry staff's perceptions about how this clinic has influenced access to preventive oral care for women at EFry.

Methods: Ninety-nine dental charts were reviewed retrospectively to determine client demographics, oral health status, services and referrals provided, and clinic attendance, and descriptive univariate statistical analyses were performed. Sixty-two satisfaction surveys were reviewed and three focus groups and three interviews with twelve clients and one focus group with four staff were conducted to identify perceptions of access to care. Focus groups and interviews were audio-recorded, transcribed verbatim, and analyzed using thematic analysis. The concept of access proposed by Penchansky and Thomas (1981) and Saurman (2015) was used to organize themes.

Results: Ninety-three women and six children attended the clinic over three years. This clinic addressed women's preventive care needs through the provision of on-site dental hygiene services. The clinic's close proximity and services offered for which women did not need to pay out-of-pocket allowed women to access preventive care that would otherwise be inaccessible due to costs of care and transportation. The person-centered and trauma-informed care further facilitated access. Thirty-three women were referred for dental care, however access was limited

by cost and likely issues of stigmatization from other dental care providers. Clinic aesthetics, communication related to time needed for care, and clinic communication strategies and advertisement precluded access.

Conclusion: This clinic facilitated access to preventive oral care for a subset of women at EFry. Findings highlight that oral health care providers should accommodate for clients receiving public dental benefits and be knowledgeable about the trauma and stigmatization faced by this group. Oral health clinics should employ appropriate clinic advertisement and design, and further accommodate for this group through flexible appointment scheduling and guidance navigating the referral process.

Lay Summary

The Elizabeth Fry Society of Greater Vancouver (EFry) is a non-profit organization that supports women and their families impacted by the criminal justice system due to experiences such as incarceration, poverty, or homelessness. In 2013, the University of British Columbia implemented a dental hygiene clinic at EFry at which dental hygiene students provide preventive oral care to women and children. This study aimed to identify how this clinic has influenced access to preventive oral care for women at EFry. Twelve women who received care at the clinic and four EFry staff were interviewed about their perceptions of how the clinic has influenced access to oral health care for women at EFry. Findings highlight that oral health care providers should be knowledgeable about trauma and stigmatization faced by this group and oral health clinics should be appropriately advertised and designed and accommodating through appointment scheduling and guidance through the dental system.

Preface

This thesis represents the original, unpublished intellectual work of the author, Kathleen Herlick.

This study received ethics approval from the University of British Columbia's Behavioural Research Ethics Board under the title "Elizabeth Fry" with the certificate number H14-01925.

Under supervision of Dr. Leeann Donnelly, the author independently conducted the literature review, participant recruitment, and data analysis for this study and wrote the manuscript. In regard to data collection, Dr. Leeann Donnelly conducted one of the three focus groups, while the author independently conducted the rest of data collection. Material from Chapters 1, 2, 3, 4 and 5 and from Tables were submitted for publication to a journal under the title "Perceptions of Access at a Community Dental Hygiene Clinic for Marginalized Women". The proportion of research conducted by the author and Dr. Leeann Donnelly is the same as the thesis, as listed above. The author independently wrote the material submitted for publication, with input from Dr. Leeann Donnelly and the two co-authors, Dr. Mario Brondani and Dr. Ruth Elwood Martin.

Table of Contents

Abstractiii

Lay Summary..... v

Prefacevi

Table of Contents.....vii

List of Tables.....xii

List of Figuresxiii

List of Abbreviationsxiv

Acknowledgements xv

Dedication.....xvi

Chapter 1: Introduction..... 1

 1.1 Literature Review 1

 1.1.1 The Correctional System in Canada 1

 1.1.1.1 Correctional Institutions for Women and Indigenous People 1

 1.1.2 Individuals in the Canadian Correctional System2

 1.1.2.1 Women and Indigenous People in the Canadian Correctional System3

 1.1.3 Life Experiences Common for Women in the Criminal Justice System.....5

 1.1.4 Challenges with Transitioning from Prison to the Community.....6

 1.1.5 Incarceration and Health.....7

 1.1.5.1 Incarceration and General Health7

 1.1.5.2 The Impact of Parental Incarceration on Child Health.....8

 1.1.5.3 Incarceration, Mental Health, and Substance Use.....9

 1.1.5.4 Incarceration and Oral Health 10

1.1.6	Delivery of Health Care in Canada	11
1.1.6.1	Delivery of Oral Health Care in Canada	11
1.1.6.2	Public Dental Programs in BC	12
1.1.6.3	Dental Insurance for Indigenous People.....	13
1.1.6.4	Delivery of Health Care in Prison	14
1.1.7	Access to Health Care	14
1.1.7.1	Access to Oral Health Care in Canada	14
1.1.7.2	Access to Medical and Oral Health Care During Incarceration	15
1.1.7.3	Access to Medical and Oral Health Care in the Community	16
1.1.8	Community-Based Dental Education and Service-Learning.....	19
1.1.8.1	Impact of Community-Based Oral Health Education Programs	20
1.2	The Elizabeth Fry Society of Greater Vancouver	21
1.2.1	Community-Based Dental Hygiene Clinic at EFry	23
1.3	Study Rationale	24
1.4	Research Question	24
1.5	Study Aims	24
Chapter 2: Methods.....		25
2.1	Ethics Approval	25
2.2	Data Collection	25
2.2.1	Retrospective Dental Chart Review	25
2.2.2	Review of Client Satisfaction Surveys	26
2.2.3	Interpretive/Constructivist Paradigm.....	26
2.2.3.1	Philosophical Underpinning	27

2.2.3.2	Conceptual Framework	28
2.2.4	Focus Groups and Interviews	30
2.2.4.1	Focus Group Guides	30
2.2.4.2	Focus Group Moderation.....	32
2.2.4.3	Inclusion Criteria and Participant Recruitment	32
2.2.4.4	Focus Group with Staff	34
2.2.4.5	Focus Groups with Clients	35
2.2.4.6	Phone Interviews with Clients.....	35
2.2.5	Post-Interview Surveys.....	36
2.3	Data Analysis.....	36
2.3.1	Quantitative Data Analysis.....	36
2.3.2	Qualitative Data Analysis.....	36
2.3.2.1	Transcription.....	36
2.3.2.2	Thematic Analysis	37
2.3.3	Trustworthiness (Rigour).....	38
2.3.3.1	Credibility (Validity).....	39
2.3.3.1.1	Reflexivity	39
2.3.3.1.2	Member-Checking.....	41
2.3.3.1.3	Data Saturation	42
2.3.3.1.4	Multiple Coding.....	43
2.3.3.1.5	Data Triangulation.....	44
2.3.3.2	Dependability (Reliability).....	44
2.3.3.3	Transferability (Generalizability).....	45

Chapter 3: Results	46
3.1 Retrospective Chart Review	46
3.2 Review of Client Satisfaction Surveys	49
3.3 Focus Groups.....	49
3.3.1 Affordability: Limited options	50
3.3.2 Accessibility: Convenience	51
3.3.3 Availability: Realistic expectations	53
3.3.4 Acceptability.....	54
3.3.4.1 Respect and attention.....	54
3.3.4.2 No judgment	55
3.3.4.3 The physical environment	57
3.3.5 Accommodation	58
3.3.5.1 Communication	58
3.3.5.2 Clients’ unique needs	59
3.3.6 Awareness: Appropriate messaging	59
Chapter 4: Discussion.....	61
4.1 Addressing Preventive Oral Care Needs	61
4.2 Women’s Financial Situations.....	62
4.3 Provider Characteristics.....	64
4.3.1 Person-Centered and Trauma- (and Violence-) Informed Care	65
4.3.2 Stigmatization.....	67
4.4 Clinic Organization	68
4.4.1 Communication Strategies.....	69

4.5	Advertisement for the Clinic	70
Chapter 5: Limitations, Significance, Future Recommendations, and Conclusion		71
5.1	Limitations.....	71
5.2	Significance	73
5.3	Future Recommendations	73
5.4	Conclusion.....	75
Tables.....		77
Figures		82
References		85
Appendices		98
Appendix A : Client Satisfaction Survey		98
Appendix B : Interview Guide for Focus Group with EFry Staff.....		100
Appendix C : Interview Guide for Focus Groups with Clients		104
Appendix D : Study Recruitment Flyer.....		108
Appendix E : Recruitment Email to EFry Staff.....		109
Appendix F : Research Consent Form.....		110
Appendix G : Post-Interview Survey		113

List of Tables

Table 1 Demographic characteristics of adult and children clients (n=99).....77

Table 2 Health provider status and dental insurance status of adult clients77

Table 3 Intake oral health status of adult clients78

Table 4 Preventive oral health services received by adult clients (n=92)79

Table 5 Clinic attendance among adult clients79

Table 6 Percentage of respondents who indicated each satisfaction factor.....80

Table 7 Examples of survey respondents’ suggestions to improve the clinic and care.....80

Table 8 Characteristics of clients who participated in focus groups and interviews.....81

List of Figures

Figure 1 Age of clients (n=90)	82
Figure 2 Reasons for attending the clinic among adult and children clients (n=86).....	82
Figure 3 Time of last dental visit for adult clients (n=71).....	83
Figure 4 Time of last dental hygiene visit for adult clients (n=30).....	83
Figure 5 Gingivitis (n=81) and periodontitis (n=86) prevalence among adult clients	84
Figure 6 Reasons for not attending a re-care appointment among adult clients (n=40).....	84

List of Abbreviations

Adverse Childhood Experience (ACE)

British Columbia (BC)

Correctional Service Canada (CSC)

Criminal Justice System (CJS)

Dental Hygiene Degree Program (DHDP)

Decayed, Missing, and Filled Teeth (DMFT)

The Elizabeth Fry Society of Greater Vancouver (EFry)

Medical Services Plan (MSP)

Non-Insured Health Benefits (NIHB)

Person-Centered Care (PCC)

Statistical Package for the Social Sciences (SPSS)

Trauma-Informed Care (TIC)

Trauma- and Violence-Informed Care (TVIC)

The University of British Columbia (UBC)

Acknowledgements

I would like to thank my supervisor, Dr. Leeann Donnelly, for taking a chance on me. Her expertise and unwavering support and guidance she provided to me throughout this project were invaluable, and I could not have completed this project without her. I am truly grateful for the opportunities she made available to me during my studies, and for her helping me realize my future career goals and supporting me while I was figuring out my path.

I would like to thank my supervisory committee members, Dr. Mario Brondani and Dr. Ruth Elwood Martin for their expertise and suggestions, feedback, and guidance throughout this project. I would also like to thank my fellow graduate student, Iris Feng, for encouraging me and teaching me all about dental hygiene!

I also extend my sincere gratitude to the collaborators at the Elizabeth Fry Society of Greater Vancouver (EFry) for supporting this project, and the women who took the time to share with me their experiences at the dental hygiene clinic at EFry.

Finally, I would like to thank the S. Wah Leung Endowment Fund and the Canadian Foundation for Dental Hygiene Research and Education for financially supporting this project.

Dedication

This thesis is dedicated to my parents, Mary and Rob, whose unconditional love and support (especially through our weekly FaceTime chats) helped me push on, and to my twin brother, Eddie, who is forever my biggest inspiration.

Chapter 1: Introduction

1.1 Literature Review

1.1.1 The Correctional System in Canada

Corrections in Canada are under jurisdiction of either the provincial or federal government, depending on the length of sentence (Malakieh, 2018). The provincial and territorial correctional system oversees adults with sentences two years less a day, who are in remand, or who are serving community sentences, while the federal correctional system is responsible for adults serving sentences of two years or longer or who are on conditional release in the community, such as parole (Malakieh, 2018). Individuals who are sentenced may be held in custody or under community supervision (Malakieh, 2018). Community supervision aims to promote a successful reintegration into society for individuals released from custody by providing, for example, accommodations and community health services when such health services are essential (Correctional Service Canada, 2018).

1.1.1.1 Correctional Institutions for Women and Indigenous People

Women sentenced to more than two years serve their federal sentence in one of six women-only correctional facilities in Canada, located in British Columbia (BC), Alberta, Saskatchewan, Ontario, Québec, and Nova Scotia (Correctional Service Canada, 2013b). Except for the women's healing lodge for Indigenous women, all women-only federal institutions are classified as multi-level security (Correctional Service Canada, 2013a, 2013b). Women who are assigned a maximum security level, and those with mental health needs or cognitive impairments, are housed in separate units to accommodate their needs within the federal system (Correctional Service Canada, 2013b).

Healing lodges are federal correctional institutions that use Indigenous values, traditions and beliefs to create appropriate services and programs for Indigenous people serving custodial sentences (Correctional Service Canada, 2019). Non-Indigenous people may also live in a healing lodge if they follow the Indigenous programming (Correctional Service Canada, 2019). Healing lodges are available for women as a minimum or medium security facility and for men as minimum security facilities (Correctional Service Canada, 2019). There is one women's healing lodge in Canada, the Okimaw Ohci Healing Lodge, located in Saskatchewan (Correctional Service Canada, 2013b, 2019). There are eight healing lodges for men in Canada, located in BC, Alberta, Saskatchewan, Manitoba, and Québec (Correctional Service Canada, 2019).

1.1.2 Individuals in the Canadian Correctional System

At any given day in 2017 in Canada, 117 645 adults and 23 006 adults were in provincial and territorial correctional services and federal correctional services, respectively (Malakieh, 2018). Among those in provincial and territorial correctional services, about 79.2% were under community supervision, and among those in federal correctional services, about 62.7% were in custody (Malakieh, 2018). Nunavut was the province/territory with the largest average rate of adults in custody and under community supervision per 100 000 adults with 3646, followed by Northwest Territories (1707), Yukon (1483), Manitoba (943), Saskatchewan (820), Prince Edward Island (686), Ontario (450), Newfoundland and Labrador (434), BC (391), Alberta (347), and Québec (273) (Malakieh, 2018). No counts were reported for Nova Scotia or New Brunswick. Young adults are overrepresented in the incarcerated population; the majority of adults admitted to custody under provincial and territorial jurisdiction (59%) and federal

jurisdiction (53%) are under 35 years of age, however this age bracket constitutes only 23% of the general Canadian adult population (Malakieh, 2018).

BC has the third largest number of adults, 15 287, in provincial and territorial correctional services among the provinces and territories (Malakieh, 2018). Compared to 2016, the overall rate of adults in correctional services has declined, however BC and Yukon saw small increases in the rate of total individuals in correctional services (2% and 3%, respectively) (Malakieh, 2018). In 2017, the average daily number of adults in custody in BC was 2734, representing a rate of 70 incarcerated individuals per 100 000 adults, the fourth lowest rate of incarceration among all provinces and territories (Malakieh, 2018). By comparison, the national rates of incarcerated adults each day was 87 individuals per 100 000 adults for provincial and territorial corrections (Malakieh, 2018). In 2017, BC had a rate of 321 individuals under community supervision per 100 000 adults, the third lowest rate of community supervision among the provinces and territories (Malakieh, 2018).

1.1.2.1 Women and Indigenous People in the Canadian Correctional System

Over ten years from 2007 to 2017, the number of women in federal correctional services increased by 32.2% from 304 women to 402 women (Public Safety Canada, 2017). In 2017, 17% of adults admitted to provincial and territorial correctional services and 8% of adults admitted to federal correctional services were women (Malakieh, 2018). For provincial and territorial correctional services, 21% of those under community supervision were women, while women made up 14% of those in custody (Malakieh, 2018). Women are most often charged with making threatening or harassing phone calls (38.0%), theft under \$5000 (37.2%), or fraud (32.7%) (Hotton Mahony, Jacob, & Hobson, 2017).

Women involved in the Canadian correctional system tend to be younger than the general Canadian female population (Hotton Mahony et al., 2017). In 2015, the majority of women in provincial custody were between the ages of 20 and 24 years (19%) and 25 and 29 years (19%), and the majority of women in federal custody (20%) were between the ages of 25 and 29 years (Hotton Mahony et al., 2017). Women between 18 and 35 years make up 60% of women in provincial custody and 57% of women in federal custody, but only 28% of women in the general Canadian population (Hotton Mahony et al., 2017). Women are also less likely to receive a custodial sentence than men, and when they do they are typically shorter sentences (Hotton Mahony et al., 2017).

In BC in 2017, 15% of adults in correctional services were women; 19% of those under community supervision and 11% of those in custody were women (Malakieh, 2018). Women with custodial sentences of 2 years or longer in BC serve their sentences at the federal Fraser Valley Institution, located in Abbotsford, BC (Martin, Buxton, Smith, & Hislop, 2012). Women with custodial sentences of less than 2 years serve their sentences at either the Alouette Correctional Centre for Women, located in Maple Ridge, BC, or at the Prince George Regional Correctional Centre in Prince George, BC (Martin et al., 2012). Since there are only two correctional institutions for women in BC, women are often isolated as they may be housed far away from their communities, friends, and family, including their children (Martin et al., 2012).

Individuals who are Indigenous are overrepresented in the Canadian correctional system. In 2017, 28% of individuals in the provincial and territorial correctional system, and 27% of those in federal correctional system, were Indigenous, which is striking given that Indigenous adults represent only 4.1% of the total adult population in Canada (Malakieh, 2018). In BC in 2017, Indigenous people accounted for 27% of adults under community supervision and 32% of

those in custody (Malakieh, 2018). Indigenous overrepresentation is higher for females than for males, with 43% of females in provincial and territorial custody being Indigenous compared to 28% of males being Indigenous (Malakieh, 2018). Over ten years from 2007 to 2017, the percentage of Indigenous adults in custody in provincial and territorial corrections and federal corrections increased from 21% and 20% to 30% and 25%, respectively (Malakieh, 2018).

Indigenous people involved with the criminal justice system (CJS) are younger (Correctional Service Canada, 2014; Public Safety Canada, 2017), have a lower education level, and are more likely unemployed than their non-Indigenous counterparts (La Prairie, 2002). Indigenous people involved with the CJS are also more likely to be affiliated with a gang, have been taken into custody for a violent crime, have a higher safety risk status, and to have served a previous sentence (Correctional Service Canada, 2014).

1.1.3 Life Experiences Common for Women in the Criminal Justice System

Women involved with the CJS often have experienced tragic life histories. Incarcerated women are likely to come from broken families, have family members involved with the CJS, have experienced homelessness, have been involved with the child welfare system, and have experienced neglect and physical and sexual abuse (Covington, 2007; Hayes, 2015; Kouyoumdjian, Schuler, Matheson, & Hwang, 2016). Physical, emotional, and sexual abuse is often done by a close family member or friend (Hayes, 2015). Teenage years for these women are often characterized by poor self-esteem, and include experiences such as teen pregnancy, addiction, and mental health problems (Hayes, 2015). Women involved with the CJS may marry abusive husbands and divorce is common, which can lead to homelessness for women and their children (Hayes, 2015). Experiences of abuse, including emotional, physical, and sexual abuse, most often from an intimate partner, can result in women utilizing shelters, including transition

homes, second-stage housing, and emergency centres and shelters (Hotton Mahony et al., 2017). A pervasive theme during adulthood is loss, including loss of children, families, homes, and employment (Hayes, 2015).

Incarcerated individuals typically experience low employment rates, low education, and low income (Hotton Mahony, 2011; Kouyoumdjian et al., 2016). Women who are incarcerated and abuse substances are more likely to live in poverty and have a lower education and income than incarcerated males (Allen, Flaherty, & Ely, 2010). In 2009, 65.6% of women admitted to provincial and territorial custody in Canada were unemployed (Hotton Mahony, 2011). Moreover, in 2009, 42.9% of women in provincial and territorial custody in Canada had completed secondary school, 35.8% had completed some secondary school, and 14.4% had completed only elementary school or less (Hotton Mahony, 2011).

1.1.4 Challenges with Transitioning from Prison to the Community

Women reintegrating into the community after incarceration face many obstacles and difficulties. One challenge after release is transitioning from the rigid schedule of institutional living to community living, which involves independence and self-reliance (Flores & Pellico, 2011), and many women must return to their neighbourhoods where there are high rates of crime and homelessness (Allen et al., 2010). Challenges such as homelessness, being a sole provider, parole and probation demands, and the stigmatization of having a criminal record make it difficult for formerly incarcerated women to seek employment (Flores & Pellico, 2011). Women may also have to make difficult decisions regarding child custody and care, as women are more likely than men to be solely responsible for their children (Flores & Pellico, 2011); two-thirds of incarcerated women have children younger than 18 years of age (Braithwaite, Treadwell, & Arriola, 2005). Women may experience a sort of downward spiral upon release, as poverty,

stigma, mental illness, separation from children, and employment difficulties all contribute to relapses in drug use or re-arrest (Flores & Pellico, 2011). Incarceration of women is typified by a “revolving door” cycle, in which re-arrest often occurs following release (Flores & Pellico, 2011).

1.1.5 Incarceration and Health

1.1.5.1 Incarceration and General Health

Women at-risk for CJS involvement often have lack of access to health care or preventive information, and enter the CJS with high health needs (Covington, 2007). Sexually transmitted infections and other communicable diseases often co-occur with drug use, prostitution, and a history of sexual abuse, experiences which are common for incarcerated women (Covington, 2007; Flores & Pellico, 2011). Incarcerated women who have experienced sexual abuse have a higher likelihood of having a high-risk pregnancy, HIV/AIDS, hepatitis C, and HPV, all of which increase the risk of cervical cancer (Braithwaite et al., 2005).

Incarceration can also have a negative impact on one’s general health. Food administered in prisons tends to be nutritionally poor, and access to health care and opportunities for physical exercise can be limited (Douglas, Plugge, & Fitzpatrick, 2009; Harner & Riley, 2013).

Incarcerated women have reported weight gain while in prison, often due to high-carbohydrate diets, inactivity, and drug withdrawal (Douglas et al., 2009; Harner & Riley, 2013; Martin et al., 2012). Individuals in custody have been found to have more chronic diseases including hypertension, diabetes, asthma, chronic liver disease, and HIV compared to the non-incarcerated population (Kulkarni, Baldwin, Lightstone, Gelberg, & Diamant, 2010), and these can worsen during incarceration (Harner & Riley, 2013). Blood-borne infections including hepatitis C and HIV are common among adults in custody (Martin et al., 2012), and may also be influenced by

the sharing of needles and tattoo and piercing equipment both inside and outside of prison (Kouyoumdjian et al., 2016).

First Nations people tend to experience poor health and have poor health behaviours; 39.5% of First Nations adults living on-reserve in BC report having excellent or very good health (First Nations Health Authority, 2012), compared to 48% of First Nations people living off-reserve (Kelly-Scott & Arriagada, 2016). First Nations adults are twice as likely to smoke daily compared to the total population of Canada, and a staggering 51.5% of First Nations adults aged 18 to 29 years smoke daily (Health Canada, 2014). First Nations adults are less likely to report consuming alcohol in the past year compared to the total Canadian population, however, more First Nations adults report binge drinking, classified as over five drinks on one occasion, on a weekly basis (Health Canada, 2014). Obesity is quite prevalent among First Nations people, as 39.8% of First Nations adults living in First Nations communities are obese compared to 16% of adults in Canada (Health Canada, 2014).

1.1.5.2 The Impact of Parental Incarceration on Child Health

Experiencing at least one adverse childhood experience (ACE), such as child abuse or neglect, domestic violence, parental divorce, caregiver incarceration, caregiver mental illness, exposure to drug or alcohol abuse, and income difficulties, relates to an increased likelihood of mental and physical health problems in adulthood compared to adults who did not experience an ACE (Bright, Alford, Hinojosa, Knapp, & Fernandez-Baca, 2015). The effect of ACEs on physical and mental health is cumulative in that exposure to more ACEs relates to poorer health outcomes (Bright et al., 2015). Children impacted by parental incarceration are often among those children most in need of health care, and parental incarceration can also impact their children's access to health care (Turney, 2017). Children with a parent who has been

incarcerated are about twice as likely to experience unmet medical care needs, dental care needs, vision care needs, and mental health care needs compared to children without a parent who has been incarcerated (Turney, 2017). While overall health outcomes of children who have experienced ACEs has been well documented, the dental health outcomes of these children have not been well studied. Children who have been exposed to several ACEs are more likely to have toothaches and decayed and/or unfilled teeth compared to those not exposed to ACEs, and exposure to a greater number of ACEs relates to an increased likelihood of poorer dental health (Bright et al., 2015).

1.1.5.3 Incarceration, Mental Health, and Substance Use

The mental health of women impacted by the CJS tends to be poor (Covington, 2007; Martin et al., 2012; Prins, 2014; Teplin, Abram, & McClelland, 1996), and the majority of individuals in corrections have a mental disorder as defined by the *Diagnostic and Statistical Manual of Mental Disorders* (Kouyoumdjian et al., 2016). Rates of post-traumatic stress disorder, substance use disorders, mood disorders, anxiety disorders, and antisocial personality disorder are common among incarcerated women, and higher than the rate in the general population (Teplin et al., 1996). Women have noted that upon the initial shock of incarceration, separation from loved ones, especially children, and having to live with other women experiencing drug withdrawal and mental health problems adversely impact their own mental health while in prison (Douglas et al., 2009).

The majority of incarcerated women with a mental health problem also have co-occurring substance use (Hayes, 2015). Incarcerated women often experience drug and alcohol abuse or dependence (Teplin et al., 1996). A systematic review by Fazel, Yoon, and Hayes (2017) found that approximately 25% of recently incarcerated males and females had an alcohol use disorder.

More alarming, at least 25% of recently incarcerated males and more than 25% of newly incarcerated females had a drug use disorder (Fazel et al., 2017). Many incarcerated individuals begin using alcohol and drugs at a young age (Hayes, 2015; Kouyoumdjian et al., 2016).

Most First Nations adults living off-reserve (60%) report excellent or very good mental health (Kelly-Scott & Arriagada, 2016), while the mental health of First Nations living on-reserve tends to be poor; in BC, 46.5% of First Nations living on-reserve were at low risk of depression, 46.0% were at medium risk of depression, and 7.5% were at high risk of depression with a higher percentage of females categorized as being at high risk (First Nations Health Authority, 2012). A shocking 22% of First Nations adults living on-reserve in BC reported having thought about committing suicide, and over 14% reported having attempted suicide (First Nations Health Authority, 2012).

1.1.5.4 Incarceration and Oral Health

Incarcerated individuals usually come from disadvantaged and traumatic backgrounds and may not have had sufficient access to dental services prior to incarceration, and thus have poor oral health upon entry to prison and many unmet dental needs (Walsh, Tickle, Milsom, Buchanan, & Zoitopoulos, 2008). Prior to incarceration, women are likely to forgo regular dental visits due to financial reasons, and many attend the dentist only when in pain (Treadwell, Blanks, Mahaffey, & Graves, 2016). The incarcerated population has more decayed, more missing, and the same or slightly higher mean DMFT scores than the non-incarcerated population (Heidari, Dickinson, & Newton, 2014; Walsh et al., 2008); incarcerated women have more decayed and less filled teeth compared to women in the general population (Rouxel, Duijster, Tsakos, & Watt, 2013). Oral health behaviours are also generally poor among the incarcerated population; incarcerated women are more likely to have poor oral hygiene, have low utilization of dental

services, have a high sugar intake, smoke, and use drugs compared to the non-incarcerated population (Rouxel et al., 2013). Over two-thirds of incarcerated adults and youth are current smokers, compared to 16% of the general Canadian population (Kouyoumdjian et al., 2016).

Dental problems may be partly attributed to drug use (Rouxel et al., 2013; Walsh et al., 2008). Individuals who use drugs often neglect their oral health and the use of opioids can result in sugar cravings and caries; people who use drugs also exhibit high levels of periodontal disease (Charnock, Owen, Brookes, & Williams, 2004). Individuals who use drugs self-report a greater difficulty accessing dental services, a lesser frequency of visiting the dentist in the past year, and a significantly higher level of oral health problems compared to those who are gender and age-matched who do not use drugs (Sheridan, Aggleton, & Carson, 2001).

Oral health behaviours among First Nations adults tend to be poor; 54.5% of First Nations adults aged 20-79 years report brushing their teeth at least twice a day compared to 73.4% of age-matched Canadian adults (Health Canada, 2014). As for unmet dental needs, 56.6% of First Nations adults had a least one tooth with untreated decay, while only 19.3% of Canadian adults had untreated decay (Health Canada, 2014). First Nations adults who live on reserves in BC report poor utilization of dental services; 25.4% reported receiving care between six months and one year prior, 18.9% reported receiving care between one and two years prior, 13.5% reported receiving care between two and five years prior, and an alarming 12.6% reported receiving care more than five years prior (First Nations Health Authority, 2012).

1.1.6 Delivery of Health Care in Canada

1.1.6.1 Delivery of Oral Health Care in Canada

Canadians with the most oral health problems are also those who have the most difficulty accessing oral health care, also known as the inverse care law (Canadian Academy of Health

Sciences, 2014; Tudor Hart, 1971). According to the World Health Organization, when health inequalities, or “differences in health status or the distribution of health determinants between different population groups”, are “unnecessary and avoidable as well as unjust and unfair”, they become health inequities (World Health Organization, 2019). Oral health inequities not only create barriers to oral health care access, but also contribute to chronic oral pain, low self-esteem, and potentially physical handicap (Canadian Academy of Health Sciences, 2014). Private practice dentistry is the most common mode of delivery of dental care in Canada, and is not suited to meet the oral health care needs of low-income and marginalized populations largely due to the hefty up-front cost of dental services and the inadequacy and inaccessibility of public dental insurance (Wallace & Macentee, 2012). Nearly all dental services in Canada (95%) are privately-funded, while only 5% are publicly-funded (Canadian Academy of Health Sciences, 2014; Marchildon, 2013).

1.1.6.2 Public Dental Programs in BC

Residents of BC may be eligible to receive dental benefits through one of six BC public dental programs, including the Medical Services Plan (MSP), Dental Supplements program, Healthy Kids, Medical Benefits Program, Dental Benefits Program for Children in Foster Care and Youth Agreements, and Preventive Dental Health Services program (Shaw & Farmer, 2015). MSP, the BC public health insurance, covers dental services for specific cases (Shaw & Farmer, 2015). The Dental Supplements program entitles all clients of the Ministry of Employment and Income Assistance to emergency dental services, and entitles seniors, Persons with Disabilities (PWD), and Persons with Multiple Persistent Barriers and their spouses to basic dental services, including preventive, diagnostic, restorative, endodontic, periodontal, prosthodontic, and oral surgery, for up to \$1000 per two years (Shaw & Farmer, 2015). Children under 19 years whose

parents receive income or disability assistance are also entitled to basic dental services up to \$1400 per two years through the Dental Supplements program (Shaw & Farmer, 2015). Coverage available for those covered under the Dental Supplements program depends on the level of income assistance clients receive (Shaw & Farmer, 2015). The Healthy Kids program entitles children of families who receive MSP premium assistance to up to \$1400 per two years of basic dental services, excluding orthodontic services (Shaw & Farmer, 2015). The Medical Benefits Program and Dental Benefits Program for Children in Foster Care and Youth Agreements covers emergency and basic dental services and orthodontic services up to \$700 per year for children in foster care (Shaw & Farmer, 2015). Finally, the Preventive Dental Health Services program provides preventive services to parents and caregivers and their children, some seniors in residential care, and those with disabilities who reside in group homes through regional health units, schools, and residential facilities (Shaw & Farmer, 2015).

1.1.6.3 Dental Insurance for Indigenous People

Public dental insurance is provided for some First Nations and Inuit individuals in Canada. The federally-operated non-insured health benefits (NIHB) program cover dental costs for eligible First Nations or Inuit individuals (Marchildon, 2013). The NIHB program covers the cost of diagnostic, preventive, restorative, speciality dental, and adjunctive services such as sedation (Government of Canada, 2018). Beginning on October 1st 2013, health benefits for First Nations residents of BC shifted to the responsibility of the provincial First Nations Health Authority; residents of BC who are Inuit still access health benefits through the federal NIHB program (Government of Canada, 2013).

1.1.6.4 Delivery of Health Care in Prison

Considering that the CJS is designed to manage criminal behaviour and maintain public safety, correctional facilities often do not have the resources to provide health services to the many women who enter custody with high health needs and a history of high-risk health behaviours and trauma (Covington, 2007). Correctional Service Canada (CSC) is responsible for providing “essential health care” that “conform[s] to professionally accepted standards” to incarcerated individuals in federal institutions (Miller, 2013), and standards for health care provision for federal correctional institutions are outlined in the *Corrections and Conditional Release Act* (Kouyoumdjian et al., 2016). Standards for health care provision at the provincial and territorial level are outlined by the federal *Canada Health Act*, and other provincial or territorial legislation may apply (Kouyoumdjian et al., 2016). The authority responsible for health care provision differs by province. In BC, Nova Scotia, and Alberta, health care in correctional facilities is provided by the governmental health authority, while in Ontario and federal facilities it is provided by the authority responsible for corrections (Kouyoumdjian et al., 2016).

1.1.7 Access to Health Care

1.1.7.1 Access to Oral Health Care in Canada

Approximately six million Canadians each year, 17.3% of the entire Canadian population, avoid visiting the dentist due to cost (Canadian Academy of Health Sciences, 2014). Canadians with dental insurance are more likely to visit the dentist than those without; 32% of Canadians have no dental insurance and only 6% have public dental insurance, while 62% have private dental insurance (Health Canada, 2010). Moreover, only 50% of individuals with low income have dental insurance, and people with low income report seeking dental care three times

less than those with higher income and those with private dental insurance (Health Canada, 2010). The incarcerated population in Canada is a particularly marginalized population, whose health and dental status is often poor and whose access to health and dental care is limited.

1.1.7.2 Access to Medical and Oral Health Care During Incarceration

Incarcerated women have described their health care as fragmented, and this fragmentation can occur at their initial incarceration, during transfers to other correctional facilities, and at release into the community (Ahmed, Angel, Martel, Pyne, & Keenan, 2016). Given that the majority of women worldwide serve custodial sentences of short duration, fragmentation of health care is likely frequent (Ahmed et al., 2016). Prison presents an opportune time to provide health care to incarcerated women, since these women often face barriers accessing health care in the community, however, accessing health care in prison may also present with challenges (Abbott, Magin, Davison, & Hu, 2017; Ahmed et al., 2016).

The quality of health care provided across Canada's correctional institutions is often lacking and varied (Miller, 2013). Overcrowding within facilities and a limited number of available prison doctors with varying degrees of training and willingness and ability to interact equitably with all patients contributes to the poor quality of health care within Canadian correctional institutions (Miller, 2013). Incarcerated women have reported that while some prison medical health care providers can be helpful and compassionate, other providers seem too busy, do not explain test results, rush appointments, or assume that women are faking symptoms to obtain medication (Harner & Riley, 2013). Incarcerated women have also expressed difficulty maintaining their oral health in prison due to limited availability of dental appointments and long wait times (Rouxel et al., 2013). Long wait times are common when seeking both medical and dental services in prison due to an extremely low provider-to-patient ratio, and women may wait

long periods with dental pain before being able to see a prison dentist (Harner & Riley, 2013; Heidari et al., 2014). Women may also avoid seeking dental care in prison due to fear that their teeth will be extracted, since extraction is a common dental procedure in prison (Harner & Riley, 2013). On the contrary, individuals in remand may choose to extract rather than save their broken tooth, to quickly relieve pain (Heidari et al., 2014). Incarcerated individuals tend to seek dental treatment only when they are experiencing pain (Heidari et al., 2014). Since women often serve relatively short custodial sentences, access to oral health services may be more limited; a previous study found that individuals in custody for less than two years utilized dental services less and had more decayed teeth than individuals serving longer sentences (Heidari et al., 2014). In the 1990s, the majority of incarcerated individuals in Canada visited a family physician while in custody more often than the general population (Kouyoumdjian et al., 2016), and those in federal custody visited the dentist, on average, 1.7 times per year while men and women in the general population visited the dentist 1.1 and 1.6 times per year, respectively ("A Health Care Needs Assessment of Federal Inmates in Canada," 2004). From 2007 to 2009, 74.5% of adults in the general Canadian population visited the dentist at least once per year (Health Canada, 2010).

1.1.7.3 Access to Medical and Oral Health Care in the Community

Individuals who have been previously incarcerated have expressed desire to improve or maintain their oral and dental health status (Binswanger et al., 2011; Laltoo & Pitcher, 2012; Martin et al., 2012), however these individuals face several barriers when accessing health care. Lack of continuity in health care, strict conditions of parole, insufficient knowledge about ways to obtain physical and mental health services, and long health care wait times make it difficult to access health care during the transition from prison to the community (Binswanger et al., 2011). Emotional difficulties during this transition period, including stress and fears about safety on the

streets, also contribute to poorer health behaviours and health care access (Binswanger et al., 2011). In a study exploring access to dental care for previously incarcerated individuals in New Brunswick, compared to dental care access inside prison, 33% of formerly incarcerated individuals said their access had improved, 23% said it decreased, and 44% said it remained the same after release from prison (Laltoo & Pitcher, 2012).

Previously incarcerated women have self-identified that a major barrier to health care access is the financial burden of paying for services and medications (Colbert, Sekula, Zoucha, & Cohen, 2013), and compared to those who have not been incarcerated, those with an incarceration history are significantly more likely to have experienced inability accessing medical or dental care due to cost, even after controlling for income, employment, and health insurance status (Kulkarni et al., 2010). Unfortunately, many people with low income who have public dental benefits may still experience difficulty accessing a dentist, since some dentists may not be willing to treat those with benefits as their reimbursements may not fully cover their business expenses (Wallace & Macentee, 2012). Women who are incarcerated also have likely experienced barriers to accessing health care prior to their incarceration; women in Ontario, Canada in provincial custody experience poor access to primary health care and many unmet health care needs in the year before their incarceration (Green, Foran, & Kouyoumdjian, 2016). A study conducted in Georgia in the United States of America explored access to dental care and barriers that impacted access to care for women before they became incarcerated (Treadwell et al., 2016). All women had not visited an oral health care provider in the past year; 66.3% of women who disclosed their insurance status reported having no insurance coverage that would cover dental or oral health services, and the majority (64.3%) reported that inadequate finances was the reason they had not visited an oral health care provider within the last year (Treadwell et

al., 2016). Moreover, 82.7% of women expressed that they did not have a regular dental provider and 57.0% said that they last visited a dental care provider because they were experiencing pain, while only 30.6% of participants said the reason for their last dental visit was to have their teeth cleaned (Treadwell et al., 2016). Incarcerated women have also reported other barriers, besides cost, to dental care, including a fear or dislike of going to the dentist or not feeling like oral health care is necessary (Treadwell et al., 2016).

For women who cycle between prison and the community, access to health care can be a state of “medical homelessness” whereby accessing care is ineffective, relationships with health care providers are transient, medical management is disrupted, and women feel excluded from their health care (Abbott et al., 2017). Formerly incarcerated women have expressed that they expect general practitioners in the community to be good communicators, approach care holistically and have an interest in the whole person, and be non-judgmental, empathetic, thorough, accessible, and flexible with appointments, however these individuals may perceive to be judged by health care providers, both in prison and in the community, as not having health problems that are worthy of care, and struggle with being perceived as legitimate patients (Abbott, Magin, Davison, & Hu, 2016; Abbott et al., 2017). Individuals may also forego disclosing their incarceration history due to fear of being stereotyped or treated differently by general practitioners (Abbott et al., 2016). Incarcerated women, especially those who use substances, have reported that prison health care providers can be more skilled about managing addiction and co-morbid conditions than community providers (Abbott et al., 2017). Those with a history of addiction and mental illness may perceive dentists as unwilling to improve their oral health and untrusting, especially in regard to prescribing analgesics for dental pain since dentists may believe these patients have intentions to abuse such medications (Brondani, Alan, &

Donnelly, 2017). Individuals involved with the CJS may also experience homelessness, and such individuals may be fearful of attending the dentist and feel disrespected and stigmatized because of their lack of housing and poor oral health (Mago, MacEntee, Brondani, & Frankish, 2018). Access to oral health care for individuals who experience homelessness is also influenced by factors including having competing life demands such as securing housing, mental health issues, substance use, past negative experiences with dental providers, embarrassment about the condition of their mouth, lack of knowledge about how to access care, cost of care and transportation, and strict access regulations (Paisi et al., 2019).

While formerly incarcerated women face several challenges when accessing health care, those with social support from family and friends may experience better access, particularly access to general practitioners, than those with little or no support (Abbott et al., 2016). Incarcerated women have indicated that comprehensive prison entry and exit health assessments as well as strategies to improve health literacy would improve their access to health care services throughout the correctional process, and have emphasized the need for health support networks to guide them through the health care system throughout the correctional process, including during the transition between prison and the community (Ahmed et al., 2016). Exposing health care students to individuals impacted by the CJS could also promote reduction of stigma and more effective delivery of health care to this marginalized population (Abbott et al., 2017).

1.1.8 Community-Based Dental Education and Service-Learning

Community-based dental education aims to promote students' professional development and increase communication skills and knowledge about diverse patient groups (Behar-Horenstein et al., 2015). Service-learning aims to provide a structured learning environment in a community setting, and helps students integrate knowledge and practice while providing care for

an underserved population (Behar-Horenstein et al., 2015). Service-learning has been incorporated into dental hygiene programs, allowing dental hygiene students to work inter-professionally and provide care to underserved individuals (Simmer-Beck et al., 2013). Dental hygiene students who have participated in service-learning have been found to have statistically significant improvements in enhanced learning, self-awareness, and intention to volunteer (Simmer-Beck et al., 2013). In a study evaluating the impact of dental students engaged in service-learning at either a homeless center, a medical organization that implements programs for uninsured or underinsured individuals, or a county health department focused on the health of migrant workers, students reflected that service-learning enhanced their awareness of health and social disparities, helped them develop a professional identity, and promoted a desire to improve access to health care for underserved groups (Behar-Horenstein et al., 2015).

1.1.8.1 Impact of Community-Based Oral Health Education Programs

Various community-based oral health education programs have positively impacted students' learning and the individuals receiving oral health care. Lashley (2008) describes an oral health program through which nursing, dental, and dental hygiene students provided on-site oral health education and preventive, emergency, and comprehensive dental care at the collaborating university dental clinic for individuals experiencing homelessness. Through this program, students learned how to provide culturally competent care and about the barriers that impede access to oral care for marginalized populations, and also had the opportunity to provide care to individuals with complex oral pathologies (Lashley, 2008). Of the patients who received an oral health screening and had a priority oral health need in the first year of the program, 55% successfully made and attended an initial appointment at the dental clinic while 67% successfully accessed care in the second year (Lashley, 2008). This program improved the oral health

knowledge of individuals experiencing homelessness who utilized the program and also their access to oral health care as 84% of the patients reported having no dental insurance and most had limited or no access to affordable oral health care, often waiting until they were in pain to utilize emergency care (Lashley, 2008).

Caton, Greenhalgh, and Goodacre (2016) evaluated a community-based outreach dental health care program that provided services for individuals experiencing homelessness or who come from disadvantaged backgrounds. Patients of the clinic described poor daily oral hygiene behaviours and poor dental clinic attendance prior to attending the clinic, and often relied on emergency dental services (Caton et al., 2016). Patients expressed that dental staff at the clinic were good communicators, approachable, supportive, friendly, compassionate and sympathetic (Caton et al., 2016). Attendance of the clinic was impacted by factors such as the weather, patients' chaotic and unpredictable lives, and whether patients were in pain; dental staff at this clinic attempted to accommodate such patients who could not attend their scheduled appointment (Caton et al., 2016). Overall, this dental health service was framed around the idea of accommodating individuals with chaotic lives and adapting to patients' needs in a community setting, an important strategy for oral health care delivery since vulnerable populations often lack self-confidence and may not be inclined to seek out dental care themselves (Caton et al., 2016).

1.2 The Elizabeth Fry Society of Greater Vancouver

The Elizabeth Fry Society of Greater Vancouver (EFry), based in New Westminster, BC, is a non-profit organization that supports girls, women and their families who are marginalized, at-risk for involvement with, or involved with the CJS in the Greater Vancouver region (The Elizabeth Fry Society of Greater Vancouver, 2019a). EFry is one of twenty-four societies in Canada which together make up the Canadian Association of Elizabeth Fry Societies (Canadian

Association of Elizabeth Fry Societies, 2018). Since women are underrepresented in prisons for violent crimes, there exists less financial support for women compared to men for counselling and educational opportunities in prison, and for post-release services such as transitional housing (The Elizabeth Fry Society of Greater Vancouver, 2019a). EFry thus aims to promote the goals of Dignity, Equality, and Opportunity by providing programs and services that emphasize gender-specific support (The Elizabeth Fry Society of Greater Vancouver, 2019a).

Multiple programs, involving over 500 volunteers, are offered by EFry to address the many issues faced by women and their families who are marginalized including poverty, homelessness, addiction, and mental health problems (The Elizabeth Fry Society of Greater Vancouver, 2019a). EFry's programs that assist girls, women and their families who are at-risk of involvement with the CJS include homeless shelters, recovery and relapse prevention residences, drop-in centres, a parenting program, and camp programs (The Elizabeth Fry Society of Greater Vancouver, 2019b). Programs that help women and their families involved with the CJS include various prison in-reach programs which help women with issues such as bonding with their children, parenting, and transitioning from prison to the community (The Elizabeth Fry Society of Greater Vancouver, 2019b). EFry also provides recovery and transitional services including addiction treatment homes and halfway housing (The Elizabeth Fry Society of Greater Vancouver, 2019b).

The main EFry location in New Westminster, BC provides various programs and resources for women and their families, including Third Party Administration, Housing First, transition housing, an emergency shelter, a women's drop-in centre, and a dental hygiene clinic. Located at the basement level, the Maida Duncan Women's Drop-in Centre is a welcoming space staffed by EFry volunteers. At this women-only drop-in centre, women and their children

can use shower and laundry facilities, collect donated clothing and household items, and eat snacks in a kitchen area which includes appliances and counter space for meal preparation. This drop-in centre also includes couches and tables at which women can lounge and socialize, and computers with free internet access along with a printer. Various social activities and programs also take place in this drop-in centre.

1.2.1 Community-Based Dental Hygiene Clinic at EFry

In 2013, EFry and the University of British Columbia (UBC) Dental Hygiene Degree Program (DHDP) partnered to establish an ongoing dental hygiene clinic at the EFry site in New Westminster, BC. At this clinic, fourth-year students in the UBC DHDP weekly provide preventive oral health services which have no out-of-pocket cost, education, health promotion, and referrals for women and their children who are clients of EFry through a community-engaged learning program. This community-based clinic was established to increase access to oral health care for women and children who are clients of EFry, and also to promote students' awareness of women and children who are marginalized due to experiences of poverty, homelessness, violence, and incarceration, and foster social responsibility among these future health care providers. From September 2013 to April 2018, this dental hygiene clinic was located within the Maida Duncan Women's Drop-in Centre at the basement level, and in Fall 2018 it was relocated to a separate room on the same floor. EFry is currently planning to implement a dental clinic at a new EFry site in Surrey, BC which is currently under construction. At this prospective clinic, it is planned that dental hygiene students in the DHDP, dental students in the Doctor of Dental Medicine program, and graduate students in Clinical Specialty Diploma program at UBC will provide comprehensive oral health services to women and children who are clients of EFry.

1.3 Study Rationale

No formal evaluation had previously been conducted to investigate how EFry's clients perceive the current dental hygiene clinic and how it has influenced access to preventive oral health care. The findings from such an investigation would help inform the design and delivery of oral health care and education at the new dental clinic at EFry to meet the needs of women and children at EFry. The purpose of this study was thus to describe the population utilizing the clinic and identify clients' and EFry staff's perceptions about how this clinic has influenced access to preventive oral care for women at EFry.

1.4 Research Question

This study aimed to address the following question: *How has the current community-based dental hygiene clinic addressed the preventive oral health needs of, and influenced access to preventive oral care for, women impacted by the criminal justice system?*

1.5 Study Aims

The specific aims of this study were to:

- 1) Describe demographics of clients who attended the clinic;
- 2) Describe clients' oral health status and how the clinic has addressed their preventive oral health care needs;
- 3) Explore perceptions of clients and EFry staff of how the clinic has influenced access to preventive oral health care.

Chapter 2: Methods

For my study, I used both quantitative and qualitative methods. Quantitative methods included a retrospective review of dental charts from 99 clients and a review of 62 client satisfaction surveys which were used to describe client demographics, identify how the clinic has addressed clients' preventive oral health needs, and inform development of the interview guide. Qualitative methods included four focus groups and three individual phone interviews which were used to explore clients' and EFry staffs' perceptions of the clinic and how it has influenced access to preventive oral care.

2.1 Ethics Approval

Ethics approval for this study was received from UBC's Behavioural Research Ethics Board (H14-01925).

2.2 Data Collection

2.2.1 Retrospective Dental Chart Review

In October and November 2017, I retrospectively reviewed the dental charts of 99 clients of the EFry dental hygiene clinic to collect information about client demographics, oral health status, services and referrals provided, and clinic attendance. The dental charts of clients who joined the clinic from the inaugural year of 2014 until March 2017 were reviewed. Due to the projected research timeline, chart data was not collected from clients who joined the clinic or returned for re-care from April 2017 onwards. Dental charts contained forms including consent for care, demographic and medical history, dental history, head and neck examination, lesion tracking, dental and periodontal record, dental hygiene care plan, and record of dental hygiene treatment progress. Data were inputted into Microsoft Excel during collection, and findings from

the retrospective chart review were used to supplement focus group and interview data to provide a richer description of the interview findings (Mackenzie & Knipe, 2006).

2.2.2 Review of Client Satisfaction Surveys

Clients of the EFry dental hygiene clinic were encouraged to complete an anonymous client satisfaction survey after completing dental hygiene services, which included questions regarding the acceptability of care provided at the clinic and gave clients an opportunity to provide suggestions or additional comments (Appendix A). I reviewed client satisfaction surveys to help identify satisfaction factors to explore in the focus groups and interviews. In total, I reviewed 62 client satisfaction surveys which were completed by clients between October 2015 and April 2018. Six of these surveys were an earlier version of the satisfaction survey and had questions which were slightly differently structured. Since these surveys were anonymous and clients were encouraged to complete them following each appointment, the same client may have completed more than one survey. Data from the client satisfaction surveys were inputted into Microsoft Excel during data collection.

2.2.3 Interpretive/Constructivist Paradigm

A research paradigm reflects a researcher's assumptions about ontology, epistemology, methodology, and ethics, which in turn inform the methods a researcher uses in their inquiry (Mertens, 2012). The qualitative component of my study was grounded in an interpretivist/constructivist paradigm which asserts that reality is socially constructed, not fixed (Mackenzie & Knipe, 2006). Methodologies in line with a constructivist paradigm follow from the philosophies of phenomenology and hermeneutics (Brinkmann, 2017; Guba & Lincoln, 1994).

2.2.3.1 Philosophical Underpinning

Edmund Husserl, a German philosopher in the late 1800s through to the 1930s is considered to be the father of phenomenology, a philosophy concerned with “the study of the phenomena, with the understanding that the term phenomena refers to the ways in which objects and events appear to us.” (Brinkmann, 2017, p. 3). Husserl’s phenomenology is rooted in essentialism and aims to describe the essential properties of human experience, or the “true nature of the phenomenon being studied” (Lopez & Willis, 2004, p. 728). It does not venture to explain the reasons for these experiences, and is thus primarily a descriptive approach (Brinkmann, 2017). Husserl’s phenomenology asserts that researchers must set aside their biases and what they already know about a phenomenon so as to be open and able to describe the essence of participants’ lived experiences (Kvale, 1983; Lopez & Willis, 2004).

Martin Heidegger, a phenomenologist and student of Husserl’s, paved the way for hermeneutics, a philosophy closely related to phenomenology but which goes beyond describing lived experience and towards interpreting this experience (Brinkmann, 2017; Lopez & Willis, 2004; Wilson & Hutchinson, 1991). Heidegger’s hermeneutics seeks to understand and interpret the meaning of lived experiences, particularly average, everyday experiences, within a given context through the analysis of text; hermeneutical methods aim to “transform lived experience into a textual expression of its essence” (Wilson & Hutchinson, 1991, p. 273). In contrast with Husserl’s phenomenological approach which aims to capture the one true essence of phenomena, the hermeneutical approach maintains that there is no one true meaning because interpretation is co-created between the researcher and participant and is dependent upon each individual’s “assumptions, ideas, meanings, and experiences” which are situated in a particular time and history (Lopez & Willis, 2004, p. 730). Also unlike the phenomenological approach which

asserts that researchers must set aside their pre-existing knowledge, the hermeneutical approach follows that researchers' pre-existing knowledge can actually help orient them to what is meaningful in terms of interpretation but researchers must try to set aside what they think they know about a phenomenon so to mitigate any influence their assumptions have on their interpretation (Brinkmann, 2017; Kvale, 1983; Lopez & Willis, 2004). Researchers adopting a hermeneutical approach may also choose to use a conceptual framework to focus their inquiry and help interpret findings, so long as the framework does not bias participants' accounts (Lopez & Willis, 2004).

2.2.3.2 Conceptual Framework

I used the concept of access to health care proposed by Pechansky and Thomas (1981) and modified by Saurman (2015) as the conceptual framework for the qualitative component of my study. This framework informed the development of the interview guides and theme organization during analyses of focus group and interview discussions.

Access to health care has been conceptualized in many ways, including as a function of supply and demand, as the ability of a population to seek and obtain health care, as utilization of health care services based on a population's predisposing factors, enabling factors, and need for health care and characteristics of the broader health system, and as the timely use of health care services, among others (Levesque, Harris, & Russell, 2013). Unlike many conceptualizations of access which emphasize mainly how the characteristics of health care resources facilitate utilization of a health care service, Pechansky and Thomas' conceptualization of access emphasizes the inter-related role that the characteristics of a health care service, provider, and client play in facilitating access to care (Levesque et al., 2013).

As outlined by Penchansky and Thomas (1981), health care access is a concept which can be separated into five dimensions: availability, accessibility, accommodation, affordability, and acceptability. Availability describes whether the amount and type of existing health services match with the amount and types of clients' needs, likened to supply and demand (Penchansky & Thomas, 1981). Accessibility refers to the relationship between the geographical location of the services and that of clients, and focuses on factors such as transportation, distance, and cost for clients to utilize the services (Penchansky & Thomas, 1981). Accommodation refers to the interaction between how the service is organized to accept clients, such as appointment scheduling and hours of operation, and clients' perceptions of these factors and ability to accommodate them (Penchansky & Thomas, 1981). Affordability describes the relationship between prices set by service providers and clients' income, ability to pay, and health insurance coverage status, and also focuses more specifically on clients' perceptions of the worth of the health service in regard to cost (Penchansky & Thomas, 1981). Acceptability refers to the relationship between clients' attitudes towards the characteristics of the service provider, such as age, sex, type of service facility, or location of the facility, and the provider's attitudes towards the characteristics of their clients, such as clients' options for financing (Penchansky & Thomas, 1981). These dimensions are not always distinct and may be interrelated, for example, availability can influence acceptability and accommodation (Penchansky & Thomas, 1981). A sixth dimension of access, proposed by Saurman (2015), is awareness. Awareness includes the health service's awareness of the local population's needs in order to provide effective care, and clients' awareness that the health service exists and their understanding and utility of such knowledge (Saurman, 2015). Effective communication about the health service promotes health literacy, and is crucial to fostering awareness (Saurman, 2015).

2.2.4 Focus Groups and Interviews

Focus groups and interviews were chosen as the methods of qualitative data collection because they foster transactional creation of meaning and thus align with an interpretivist/constructivist research paradigm (Mackenzie & Knipe, 2006) and a hermeneutical approach (Kvale, 1983; Wilson & Hutchinson, 1991). The purpose of a focus group is to “understand how people feel or think about an issue, product, service or idea”, and are well-suited to describing the experiences clients have with health care services (Krueger & Casey, 2000; Owen, 2001). Focus groups also are especially useful when including marginalized or vulnerable populations in qualitative research because they encourage participants whose opinions and views are not normally sought to speak up, and the emphasis on group interaction can shift the power from the interviewer to participants, emphasizing participants’ points of view (Owen, 2001).

2.2.4.1 Focus Group Guides

A semi-structured interview guide was developed for the focus group with EFry staff (Appendix B) and with clients (Appendix C) based on the concept of access (Penchansky & Thomas, 1981; Saurman, 2015) and data collected from the retrospective chart review and review of client satisfaction surveys. A semi-structured interview guide was used to allow participants to discuss aspects of the clinic important to them while also emphasizing access-related issues.

The interview guides were structured according to guidelines described by Krueger and Casey (2000) and Morrison-Beedy, Côté-Arsenault, and Feinstein (2001). As with all methodological considerations of qualitative research, questions asked in the interview guide related to my overall research question. Before the introduction of questions, I outlined an

overview of the discussion topic, issues of confidentiality, and discussion ground rules (Krueger & Casey, 2000). Questions were structured to sound conversational, clear, short, and open-ended, and I tried to not reiterate questions using synonyms so to not confuse participants about the question being asked, unless the initial question was confusing to participants (Krueger & Casey, 2000). The first question was an ice-breaker, which allowed participants to introduce and share something about themselves to help develop rapport (Krueger & Casey, 2000; Morrison-Beedy et al., 2001). This was followed by an introductory question to introduce the focus of the discussion and ask participants about their initial impressions of the dental hygiene clinic (Krueger & Casey, 2000). The remaining questions continued to move from general to specific, and from less to more sensitive topics (Krueger & Casey, 2000; Morrison-Beedy et al., 2001). The ending question was included to bring closure to the topic and allow participants to voice their overall view of how the dental hygiene clinic has impacted them, and the final question allowed participants to discuss any additional points important to them (Krueger & Casey, 2000). At the end of the focus groups, using the brief notes I had taken during, I offered a final summary of key points of the discussion before asking whether participants had anything else to add to the summary (Krueger & Casey, 2000).

Qualitative data collection and analysis was conducted concurrently so data analysis from previous focus groups and interviews could inform the interview guide for the remaining focus groups and interviews. Following the focus group discussion with EFry staff and the first two focus groups with clients, two questions were added to the script: “What is it like having your teeth cleaned by students?” and “We’ve heard from EFry clients and staff that a lot of clients don’t seem to know about the dental hygiene clinic here. How do you think we could improve how we promote the program?”

2.2.4.2 Focus Group Moderation

Moderators are responsible for guiding a focus group discussion without participating, since expressing one's own views about a topic could introduce bias and lead participants to say certain things (Gill, Stewart, Treasure, & Chadwick, 2008). I moderated the focus groups based on guidelines from Krueger and Casey (2000). At the beginning of the focus groups, I told participants that I expect and respect different points of view and that both positive and negative comments are valuable, and encouraged participants to discuss amongst each other instead of just directing their responses toward me (Krueger & Casey, 2000). I further utilized two moderation techniques that Krueger and Casey (2000) outline as essential for moderators: the five-second pause and the probe. I tried to pause for at least five seconds after asking a question to allow participants to think of a response or ask for clarification of the question; silence can be telling as to whether a question needs to be altered for future focus groups or whether a question is difficult to answer (Krueger & Casey, 2000). I was also prepared to probe participants for more information or for alternative opinions, for example by saying "Is there anything else?" or "Has anyone had a different experience?" (Krueger & Casey, 2000, p. 110). I further tried to respond to participants' responses using phrases such as "OK", "Yes", or "Uh huh", since these do not indicate accuracy or agreement with participants' answers, and avoid responses such as "Correct", "That's good", or "Excellent" (Krueger & Casey, 2000, p. 113).

2.2.4.3 Inclusion Criteria and Participant Recruitment

Convenience sampling was used to recruit client participants; individuals eligible for participation in the focus groups and interviews must have been 18 years of age or older, English-speaking, and a past or present client of the dental hygiene clinic at EFry.

My supervisor conducted the first focus group with clients in August 2017, and I began recruiting participants for the remaining two focus groups with clients in March 2018. Research study recruitment flyers were posted in the EFry building with study information and researcher contact information eleven days before the second planned focus group with clients (Appendix D). Individuals interested in participating in the focus groups with clients were directed to contact either me or an EFry staff member by phone. Individuals were given a choice of contacting an EFry staff member since I anticipated that women who experience marginalization due to involvement with the CJS may be apprehensive to contact someone who is a stranger to them, and especially someone from an outside organization such as a university. Due to low recruitment numbers for the second focus group with clients, flyers were altered to reflect suggestions for client recruitment that arose out of the focus group with EFry staff. EFry staff indicated that clients may be apprehensive about participating in a focus group, due to negative attitudes towards research or academic institutions, because the name of the affiliated university (UBC) is largely listed on the flyers, so the UBC logo was minimized on subsequent recruitment flyers. An instruction for clients to contact the phone numbers listed on the flyer if interested in participating was also added to the flyers, and flyers were altered to mitigate potential worries clients might have with the word research. After these changes were made, no more clients inquired about participation. Participation thus could have also been hindered if women had a negative relationship with the EFry staff member listed on the recruitment flyers. I then adopted an alternate recruitment strategy through which current clients of the clinic were informed about this study by the dental hygiene students and clinic instructor following their appointments and were instructed to contact me for further information.

I called recruited participants the day before the focus group to confirm their attendance. Six clients participated in the first focus group conducted by my supervisor and two clients each participated in the second and third focus groups, of whom one had also participated in the first focus group, which was found out later. Since only two clients participated in the second and third focus groups, these focus groups were more like open discussions with two participants rather than true focus groups which involve a larger group of individuals. Due to continued low interest in focus group participation, I conducted individual phone interviews with three clients. A total of 12 clients participated in the focus groups and phone interviews.

Two EFry collaborators helped identify EFry staff to invite to participate in a focus group. Based on their suggestions, I recruited staff representatives from different programs and roles who worked at the EFry building in New Westminster, BC, as I anticipated that each would have a unique perspective of how the clinic has influenced access to care for their clients. I contacted eight EFry staff members by email (Appendix E) about participating in the focus group, and these staff members worked in various programs and roles at EFry including building reception, building repairs, a transition house, a women's shelter, a women's drop-in centre, Housing First, and fund development. Among the eight staff who were sent a recruitment email, four participated in a focus group.

2.2.4.4 Focus Group with Staff

I conducted a focus group with four EFry staff members in March 2018 at the Maida Duncan Women's Drop-in Centre to explore how the dental hygiene clinic has influenced access to preventive oral care for EFry clients from the perspective of staff. An EFry collaborator was present at the focus group to take notes. Prior to participation in the focus groups, staff were asked to read and sign a research consent form outlining the purpose, risks, and benefits of

participating in the study, and were given a copy of this consent form (Appendix F). Non-verbal cues from participants and group dynamics were captured through field notes. Staff who participated in the focus group did not receive an honorarium as they were being compensated through their employment during the focus group discussion.

2.2.4.5 Focus Groups with Clients

I conducted the second and third focus groups with clients in March and April 2018 at the Maida Duncan Women's Drop-in Centre to explore clients' perceptions of how the dental hygiene clinic has influenced access to preventive oral care. An EFry collaborator was present at each focus group to help take notes and provide familiarity for clients, as I anticipated that clients may feel more comfortable sharing information with a familiar person present. Prior to participation in the focus groups, clients were asked to read and sign a research consent form outlining the purpose, risks, and benefits of participating in the study, and were given a copy of this consent form (Appendix F). Non-verbal cues from participants and group dynamics were captured through field notes. Clients who participated in the focus groups received coffee, lunch, and a \$25 grocery store gift card for their time.

2.2.4.6 Phone Interviews with Clients

I had difficulties recruiting additional clients to meet with me in-person for a focus group, so I opted to instead conduct phone interviews with three clients. I conducted two individual phone interviews with clients in April 2018 and one phone interview in June 2018. Prior to beginning each phone interview, I read aloud the research consent form to each client and received their verbal consent to participate. I explicitly encouraged clients to take note of the contact information of the Principal Investigator, graduate student, and the UBC Office of Research Ethics in case of any questions, and slowly read aloud this contact information. Clients

who participated in an interview were mailed a \$25 grocery store gift card for their time and were also offered to be mailed a copy of the research consent form, however all three participants declined.

2.2.5 Post-Interview Surveys

Clients were given a post-interview survey following their participation in a focus group or interview to collect information about participant demographics, clinic attendance, and services and referrals received (Appendix G). Clients who participated in phone interviews provided verbal answers to the survey questions.

2.3 Data Analysis

2.3.1 Quantitative Data Analysis

Quantitative data from the retrospective dental chart review was organized in Microsoft Excel for input into the software Statistical Package for the Social Sciences (SPSS) Statistics® Version 25 (IBM) for univariate descriptive statistical analysis. Data from the review of client satisfaction surveys and post-interview surveys were organized using Microsoft Excel and analyzed descriptively.

2.3.2 Qualitative Data Analysis

2.3.2.1 Transcription

Focus groups and interviews were audio-recorded and transcribed verbatim. I transcribed the focus group with EFry staff and the first two focus groups with clients, and the remaining focus group and three phone interviews with clients were transcribed using a transcription service. I then reviewed each transcript once with the audio to ensure accuracy and to familiarize myself with the data (Braun & Clarke, 2006). In the transcripts and for the purposes of reporting,

participants were referred to by an assigned pseudonym. Transcripts were managed using the qualitative data management software, NVivo 12™ (QSR International).

2.3.2.2 Thematic Analysis

Thematic analysis has been said to be compatible with many different philosophies, particularly phenomenology (Terry, Hayfield, Clarke, & Braun, 2017) and hermeneutics (Wilson & Hutchinson, 1991), making it a suitable choice for qualitative researchers adopting such approaches. Many researchers argue whether thematic analysis should be considered an data analysis method on its own, or whether it is just a strategy used in multiple qualitative analysis methods (Terry et al., 2017). In line with Braun and Clarke (2006), I regard thematic analysis to be a method of analysis which is used to identify, analyze, and report themes within data and also interpret meaning.

Thematic analysis when conducted in a qualitative paradigm is often inductive whereby coding is data-driven and researchers seek to identify themes through repeated engagement with the data (Braun & Clarke, 2006; Terry et al., 2017). Coding and identifying themes is viewed as subjective and interpretive; analysis is done at the intersection of the researcher, their knowledge, skills, and experience, the data, and the theoretical and conceptual frameworks (Terry et al., 2017). Braun and Clarke (2006) outline six phases of thematic analysis: familiarizing yourself with the data, generating initial codes, searching for themes (in which codes are combined into themes), reviewing themes (in which data within themes are reviewed to ensure they fit well within the themes, and themes are reviewed to ensure they meaningfully represent the entire data set), defining and naming themes (in which themes are named to ensure they capture their essence), and producing the report (in which certain data extracts are chosen for the report because they represent the essence of each theme) (Braun & Clarke, 2006).

I used an inductive approach to thematic analysis to analyze the focus group and interview data; data were analyzed on their own, and codes and themes were identified apart from the conceptual framework used (the concept of access) (Braun & Clarke, 2006). Data that related to the research question were coded line-by-line; extracts of data from the transcripts, rather than individual data items, were coded to ensure that context of the discussions was retained (Braun & Clarke, 2006). Codes were then organized into themes, which were identified based on their prevalence across focus groups and interviews; a theme was defined if it was voiced by more than one participant to highlight the most frequently discussed themes (Braun & Clarke, 2006). Themes were then arranged within the concept of access. Collection of focus group and interview data was conducted concurrently with thematic analysis until no new, or “surprising”, codes and themes were identified from subsequent focus groups and interviews (O’Reilly & Parker, 2012). I referred to the field notes, which I captured during the focus groups, during thematic analysis to ensure that I considered the context of the discussions in my interpretations.

2.3.3 Trustworthiness (Rigour)

In qualitative research, rigour is used to establish trust in research findings (Thomas & Magilvy, 2011). In 1985, Lincoln and Guba said that rigour in qualitative research attends to the question, “How can an inquirer persuade his or her audiences (including self) that the findings of an inquiry are worth paying attention to, worth taking account of?” (Thomas & Magilvy, 2011, p. 152). In both qualitative and quantitative research, rigour is achieved through systematic and conscious research design, data collection, analysis, and representation (Mays & Pope, 1995). The criteria included in, and strategies used to ensure, rigour in qualitative research differ from those used in quantitative research and among qualitative research approaches (Mays & Pope,

1995; O'Reilly & Parker, 2012). Different qualitative research paradigms have also adopted diverse terms for the criteria of rigour, including credibility, neutrality and confirmability, consistency and dependability, and applicability and transferability (Golafshani, 2003).

In 1989, Guba and Lincoln adopted the now widely-used term “trustworthiness” to denote rigour in qualitative research, which includes the criteria of credibility, dependability, transferability, and confirmability (Morse, 2015; Thomas & Magilvy, 2011). Confirmability, parallel to objectivity used in quantitative research, is achieved when credibility, transferability, and dependability have been ensured (Thomas & Magilvy, 2011). Morse (2015) suggests that qualitative researchers should use the term rigour rather than trustworthiness and re-adopt the mainstream quantitative-based criteria of validity, reliability, and generalizability. For my study, I used the criteria for trustworthiness put forth in 1989 by Guba and Lincoln and indicated also the mainstream term associated with each criterion.

2.3.3.1 Credibility (Validity)

Credibility refers to whether the qualitative data accurately represents the human experience, and can be fostered through strategies such as reflexivity, data triangulation, data saturation, member-checking, and multiple coding (Thomas & Magilvy, 2011; Bowen, 2008; Golafshani, 2003; Mays & Pope, 1995; Morse, 2015).

2.3.3.1.1 Reflexivity

It is important for qualitative researchers to consider their positionality in relation to the research context and participants, including how their “multiple, shifting and socially constructed identities intersect with those of their participants or communities” (Tilley, 2016, p. 30).

Researcher positionality is especially important to consider in an interview context, since there will always be an asymmetry of power as the interviewer largely defines and controls the

interview situation (Kvale, 1996). Recognizing your positionality as a researcher informs your ability to gain access to the research context and participants, and also informs how you analyze and represent data (Tilley, 2016).

My identity and participants' identities intersect in terms of our biological sex or identified gender being female, and contrast in terms of our experiences and social circumstances. I am a white, heterosexual, privileged graduate student in my early-twenties who comes from a middle-class socioeconomic status and who is surrounded by supportive relationships. My positioning contrasts with the low-income status of the community involved in my research and their experiences with marginalization due to race, sexual orientation, CJS involvement, trauma, and abuse. These differences position me as largely an outsider to the community involved in my research.

I am also positioned as an outsider to the context in which I conduct my research. I completed a Bachelor of Science degree in Biology, and my interest in health research involving groups who are marginalized led me to pursue graduate studies. Prior to commencing graduate studies, I had no previous experience with, or knowledge of, community-based dental hygiene programs like the EFry clinic, nor did I have knowledge about the social circumstances of women impacted by the CJS and community organizations such as EFry that support this population. My positioning as a newcomer to this field and clinic made it relatively easy for me to approach this study with few assumptions and biases about the program and organization (EFry). Also considering that the EFry dental hygiene clinic has been in operation for over three years and I am a new face to participants, I anticipated that my outsider status may make participants more comfortable providing honest responses (especially negative input) during focus groups and interviews if they did not view me as having been heavily invested in the clinic

in the past. However, I also reflected that some participants may be wary to talk to me since I am an outsider.

My positioning as an outsider to the research context and community informed my data collection, analysis, and representation. During the focus groups and interviews, I listened to what participants had to say with little intervention or re-direction of the discussion, so participants' voices were heard and respected, and my own research interests did not supersede the discussion. During data analysis and representation, I focused on what the participants said and continuously reflected on how my own voice was present in the representation of data. I wrote and re-wrote my analysis many times, each time trying to further let my participants' voices tell the story as much as possible.

2.3.3.1.2 Member-Checking

During member-checking, the qualitative researcher returns to participants with their interpretation of the interview data to ensure they have accurately interpreted and represented participants' experiences (Thomas & Magilvy, 2011). Member-checking can take many forms, including returning to participants a summary of the interview or whole interview transcript and/or the researcher's initial interpretations, a summary of emerging themes, or a draft research report (Thomas, 2017). It is debated whether member-checking is a useful strategy for establishing rigour. Some argue that it is not particularly useful for ensuring rigour (Barbour, 2001; Morse, 2015), while others maintain its usefulness (Birt, Scott, Cavers, Campbell, & Walter, 2016; Lincoln & Guba, 1985). I regarded member-checking as a useful strategy and used it to ensure the validity of my initial interpretations of the focus group and interview data (Thomas, 2017; Nowell, Norris, White, & Moules, 2017).

I re-contacted seven client participants by phone and gave each an opportunity to review the transcript of their focus group or interview and/or listen to a short summary of what they said to ensure my interpretations were correct and allow participants to provide additional information. I also asked participants follow-up questions to help clarify certain phrases they said. Birt et al. (2016) further maintain the usefulness of member-checking for establishing validity only when the member-checking strategy aligns with the study's epistemological stance. In line with a constructivist paradigm, I gave participants the opportunity to add, change, or remove words or phrases they said, thus allowing participants to ensure that the transcripts appropriately represent their experiences (Birt et al., 2016).

Four client participants chose to listen to a short summary analysis over the phone, and two chose to review the entire transcript sent by email as requested. One participant chose to review both and was given a hardcopy of the transcript in-person. All seven participants were satisfied with the initial analyses and five provided additional information and clarification to their initial statements. Three participants each made two clarifications and one of these participants added information about the impact of this clinic. One participant made nine clarifications and further emphasized the importance of informing more clients with low-income about the services provided at this clinic which had no out-of-pocket costs. One participant made three clarifications and further expressed her gratitude for the dental hygiene students. Finally, one participant who reviewed the entire transcript changed the wording and grammar of a phrase she had initially said in the focus group to better reflect what she wanted to say.

2.3.3.1.3 Data Saturation

In qualitative research, participant sampling is more focused on sample adequacy rather than sample size; an adequate sample is reached when there is no more variation in the data

being collected, thus demonstrating that the research has depth and breadth and saturation has been reached (Morse, 2015; O'Reilly & Parker, 2012). Saturation can be assessed in many ways, including theoretical saturation, often used in grounded theory approaches, or data/thematic saturation, however there are discrepancies and confusion among qualitative researchers about what saturation is and how and when it should be applied (O'Reilly & Parker, 2012).

I assessed data/thematic saturation of my study. Data saturation occurs when data collection no longer yields new information, indicated by data replication or redundancy (Bowen, 2008), or when there are fewer or no “surprises” in the data (O'Reilly & Parker, 2012, p. 192). When data is saturated there is replication within themes, which ensures completeness of the research and thus rigour (Bowen, 2008). By the coding phase of my second phone interview, I was identifying redundant and unsurprising data. I stopped collecting data after my third phone interview, as I did not identify any further “surprising” data.

2.3.3.1.4 Multiple Coding

Having multiple individuals independently code and interpret qualitative data is a technique which can be used to help ensure rigor (Barbour, 2001). Consulting with peers who are experienced in qualitative data analysis to discuss the coding of transcripts can help ensure credibility of the analysis (Thomas & Magilvy, 2011). To ensure the credibility of thematic analysis in my study, my supervisor and I made preliminary codes for the first focus group separately and met to discuss the coding until consensus was reached (Nowell et al., 2017). During the thematic analysis and reporting stages of my research, I met frequently with my supervisor to discuss analysis and theme identification (Braun & Clarke, 2006). Themes were reviewed and renamed; some themes were removed as they were deemed as not meaningful to the entire data set (for example, “Receiving oral health care from dental hygiene students”)

because these themes were better represented in an existing theme (for example, the theme “Receiving oral health care from dental hygiene students” was better represented within the theme “Appropriate messaging”) and other themes were combined into one theme (for example, “The rarity of free oral health care”, “Supplementing oral health care received through dental coverage” and “Dental coverage only covers oral health care for clients’ children” were combined into one theme, “Limited options”). Other themes were renamed to better reflect the essence of the theme (for example, “Availability of free oral health services is limited” was renamed as “Realistic expectations”).

2.3.3.1.5 Data Triangulation

Triangulating data from multiple sources can ensure credibility of qualitative research, and is particularly appropriate in a constructivist paradigm as using multiple methods of data collection can result in a more valid and reliable construction of participants’ realities (Golafshani, 2003). I triangulated quantitative data from the retrospective chart review, review of client satisfaction surveys, and focus groups and interviews to provide context and credibility to the focus group and interview findings. Through a retrospective review of clients’ dental charts, I collected information about client demographics, health and oral health status, services and referrals provided, and clinic attendance to provide context about the population whom I interviewed. I also triangulated data from the client satisfaction surveys and focus groups and interviews to ensure credibility of the focus group and interview findings by comparing and contrasting satisfaction factors related to access.

2.3.3.2 Dependability (Reliability)

Dependability refers to whether another researcher can follow the decision-making trail of the researcher to repeat the study; providing a detailed description of the methods used can

help ensure dependability (Thomas & Magilvy, 2011). I have provided a detailed description of the study purpose, participant recruitment, and data collection, analysis, and representation, and have also outlined the strategies I used to ensure credibility of the data (Thomas & Magilvy, 2011).

2.3.3.3 Transferability (Generalizability)

Transferability refers to whether the research findings can be transferred to other contexts or groups (Thomas & Magilvy, 2011). Most qualitative research does not aim to be generalizable to many contexts, however researchers can address transferability by providing a dense description of their research context and comparing and contrasting it to other contexts to inform the applicability of the research findings (Mays & Pope, 1995; Thomas & Magilvy, 2011). I discuss the transferability of my research in the Conclusion section of my thesis.

Chapter 3: Results

The retrospective review of 99 clients' dental charts revealed information about client demographics, oral health status, services and referrals received, and clinic attendance. The review of 62 client satisfaction surveys highlighted satisfaction factors of the clinic, which were further explored in the three focus groups and three interviews with clients and one focus group EFry staff. In the focus groups and interviews, clients and staff discussed nine themes related to the concept of access that describe how the EFry clinic has influenced access to preventive oral care.

3.1 Retrospective Chart Review

Information about demographics is presented for both adult and children clients. Ninety-three women, who ranged in age from 20 to 66 years (average age 41.0 ± 11.1 years), and six children, who ranged in age from six to 16 years (average age 10.33 ± 3.50 years), attended the clinic over three years (Figure 1). Although the clinic accepts children of any gender, all children who attended the clinic were female (Table 1). Seven clients did not specify their gender (Table 1), and since there were only "Female" and "Male" options for gender this could suggest that clients did not identify with either gender or simply forgot to indicate their gender. Thirty-nine clients (39.4%) lived within the EFry building and three were homeless (Table 1). Among those who lived in the EFry building, 29 clients specified the residence program they utilize; 15 clients utilize shelter housing at EFry, among whom four are children, and 14 clients utilize transition housing at EFry (Table 1). Forty clients enrolled at the clinic in the first academic year (2014-2015), while 35 enrolled in 2015-2016 and 24 enrolled in 2016-2017 (Table 1). The main reasons for attending the dental hygiene clinic included for periodontal therapy, pain and sensitivity, and referral for dentures (Figure 2).

Information about health provider status and dental insurance status is presented only for adult clients (Table 2). Fifty-four clients (58.7%) had a physician while only 19 clients (20.4%) had a dentist. Among the 56 women (57.6%) who reported having dental insurance, 25 received PWD benefits, 15 received Social Service Benefits, nine had private or personal insurance, six received NIHB, and one client received benefits from CSC; some women reported having multiple types of dental insurance.

Information about dental visit history is presented only for adult clients. Among the 71 clients who reported the time they last visited a dentist, 34 clients (47.8%) did so two or more years ago (Figure 3). Among the 30 clients who reported the time they last received dental hygiene care, 17 clients (56.7%) did so two or more years ago (Figure 4).

Information about health status and oral health status is presented only for the adult clients. The majority of women reported having at least one health condition (67.0%) and taking at least one medication (61.5%). Adults mostly had arthritis (16.1%) or anxiety (12.9%) and reported taking antidepressants (37.5%) or anticonvulsants (23.2%). Seven women reported taking opioid substitution therapy and 42 women (44.2%) smoked. Women had on average 25.35 ± 5.35 teeth and one was edentulous. The average of decayed (D), missing (M), and filled (F) teeth (T) (DMFT) was 15.85 ± 11.30 . Almost all clients (96.3%) had gingivitis upon intake and 58 women (67.4%) had periodontitis, of whom 35 women had mild periodontitis, 18 had moderate, and 8 had severe (Figure 5). Fifty-four clients (62.0%) had at least one suspected carious lesion, 30 (34.1%) had at least one fractured tooth, 15 (17.0%) had at least one mobile tooth, and eight (9.0%) had at least one oral lesion (Table 3). Upon enrolment, clients had existing restorations, sealants, temporary restorations, veneers, implants, and dentures; 53 clients (60.2%) had at least one composite restoration, 59 (67.0%) had at least one amalgam restoration,

and nine clients (10.2%) each had at least one full gold crown or porcelain fused to metal crown (Table 3).

Information about dental hygiene services provided is only presented for adult clients. Clients received oral assessments, periodontal therapy, fluoride varnish, oral health education, sealants, temporary restorations, and referrals (Table 4). Ten women did not receive dental hygiene treatment. Six women did not complete an oral assessment or agree to treatment at their initial appointment and did not return to the clinic, two were uninterested in care, one prematurely left their appointment because they were uncomfortable receiving care from the dental hygiene students, and one did not choose treatment because they preferred to see a dentist instead. Referrals were provided to 33 women, mostly for suspected caries (16 clients), a fractured tooth (11 clients) or dentures (7 clients) (Table 4).

Information about clinic attendance is presented only for adult clients. Referral attendance was documented for eight women, among whom three attended their referral (Table 5). Three women did not attend their referral due to financial reasons and one woman prematurely left the clinic before being given the referral form. The reason for non-attendance was not documented for one woman. Of the 64 women who completed their initial treatment, 24 (37.5%) returned for a re-care appointment (Table 5). Reasons for not attending a re-care appointment are shown in Figure 6. Ten women (10.9%) cancelled an appointment and 18 women (19.6%) did not show up to a scheduled appointment for reasons including being sick or having mouth or jaw soreness, having an injury, having a time conflict, mistaking the appointment day, moving, being prohibited from attending EFry, or having unstable life circumstances.

3.2 Review of Client Satisfaction Surveys

Based on the review of 62 satisfaction surveys, women were satisfied with their care and grateful for the service. Some aspects inherent to the dental hygiene clinic were perceived as less satisfactory, including whether students had the necessary supplies to provide care, clients' comfort level receiving care, the perceived impact on clients' oral health knowledge, whether students explained the time needed for treatment, and whether clients received a referral for additional care (Table 6). For women who indicated a lower satisfaction level at the clinic, it was related to the dim lighting, less comfortable dental chairs, and discomfort due to treatment. Women provided open-ended suggestions to improve the clinic atmosphere including music for distraction purposes, more comfortable dental chairs, and brighter lighting (Table 7). Suggestions to improve care included providing explanations about the details of and time needed for care, having specialized oral self-care supplies for clients, providing written oral self-care resources, and improving student-client communication (Table 7).

3.3 Focus Groups

Based on the focus groups and interviews with clients and EFry staff, nine themes were identified in relation to access to preventive oral health care. Affordability was discussed in terms of "limited options", accessibility was described by the clinic's "convenience", and availability of services was described by "realistic expectations". Themes relating to the acceptability of the clinic included "respect and attention", "no judgment", and "the physical environment". Accommodation included "communication" and "clients' unique needs", and awareness was discussed in terms of "appropriate messaging". Findings from the review of satisfaction surveys were triangulated with the focus group and interview findings; triangulation of these findings confirmed the access-related factors of the clinic and care provided as discussed

in the focus groups and interviews. The demographic characteristics of, services and referrals received by, and clinic attendance of seven clients who participated in focus groups and interviews, as collected from the post-interview surveys, are highlighted in Table 8.

3.3.1 Affordability: Limited options

Participants described how the financial burden of oral health care has precluded their access to care in the past and that not needing to pay out-of-pocket for the services provided at this clinic was a major reason for attending the clinic. Melanie and many other participants told me that there are limited options for oral health services which do not require individuals to pay for out-of-pocket: “[You’re] the only ones that do free cleaning ... everywhere [else] you either need coverage, insurance coverage, or work coverage.”

Nearly 60% of clients had some form of dental insurance benefits. Participants whose coverage would have been limited to diagnostic or emergency treatment, or maximized if they had to use it for preventive services, were able to receive preventive services without using their current dental coverage, as Carrie described,

I receive government disability benefits so there’s only a limited amount of funds for a two-year period of time, and I find that the government benefits are not adequate ... I wanted to try it to see what this clinic was like, and not to exhaust my government benefits too quickly.

Participants who did not receive dental insurance benefits were able to receive preventive services through this clinic which are often otherwise unaffordable, as Clara described,

... the \$100 that it would normally cost to get my teeth cleaned honestly wouldn't fit in my budget and I would have just said no ... Because I'm on disability [my children] get their teeth done for free but not for me, it costs me money.

Since individuals who receive PWD benefits are entitled to basic dental services, including preventive services, up to \$1000 per two years (Shaw & Farmer, 2015), Clara may have been unaware of what services are included in her benefits, or she may have not yet registered to receive these benefits. This could suggest a lack of knowledge around navigating dental insurance plans.

Clara described also how limited options to affordable oral health care exacerbates oral health problems, and how the clinic's affordability allowed her to access care and become aware of such problems:

If [the clinic] wasn't for free, honestly, I wouldn't have [come] and I wouldn't know what was going on so I would have neglected [my mouth], it would have got worse, I would have been in pain, I wouldn't have been able to eat properly. So to be aware of what's going on was awesome.

Some participants also related affordability in terms of the convenient location of the clinic that mitigated transportation costs if it had been located elsewhere, as Sabrina, who lived within a ten-minute walking distance to the clinic, told me, *"It's free! So I like to come to here. Otherwise I have to take a bus, two-zone fare, to pay the fare, then pay the cleaning fee."*

3.3.2 Accessibility: Convenience

The clinic was accessible because it is conveniently located, being close to public transit and participants' place of residence or employment, and also because it is located in a health-oriented area as Carrie explained,

Location, transit transportation is around, both the SkyTrain and buses, and it's also near the hospital and there's a lot of medical facilities in the neighborhood, so it's a neighborhood full of doctors and dentists anyway.

Nearly 60% of clients lived within the city at which the clinic is located, about two-thirds of whom lived within the EFry building. Convenience was also related to the location of the clinic being in the same building where clients attend for other services, as Rachel noted, “*It’s convenient. It’s free and I’m always here at the drop-in, why not [attend the clinic]*”. EFry staff also said that the location of the clinic facilitates access to care for clients already utilizing programs and services at this EFry location, and Kaitlyn, an EFry staff member, further described how the clinic’s in-house location next to housing services co-facilitates access to both preventive oral health care and housing services:

[The clinic has facilitated] referrals [to the clinic] for the clients [of housing services] and also when the dental clinic’s here we tend to have our door open so we’ve got a lot of walk-ins as well, so it’s really impactful for ... the clients to have access and use of our program.

For participants who travel by public transportation, some perceived the clinic as convenient compared to other community-based programs which require substantial time to travel to, as Rachel described,

... [the clinic is] at nine o’clock over there at Douglas College. So I have to catch a bus ... it takes me an hour and a half to get there, it’s really too much.

For others who travel by public transportation and live further from the clinic, the location had the opposite impact and was seen as inconvenient due to the cost of travel, as voiced by Melanie:

I didn’t bring my children because normally everything that they need is covered by assistance. So I can go somewhere closer to where we live for them ... To take the SkyTrain it costs me ten dollars for a bus pass each day that I went, which took two days

to fully clean my whole mouth. And, if I had to cart two children ... that would be more difficult. Plus extra [money] for [transit] passes.

During member-checking, Melanie further expressed that while money spent on transit expended grocery money, taking care of her oral health took precedence over affordability.

3.3.3 Availability: Realistic expectations

Preventive services including oral assessments, periodontal therapy, fluoride varnish, oral health education, sealants, temporary restorations, and referrals were available to address clients' preventive care needs. Such preventive services decreased participants' teeth pain and sensitivity, educated participants about the cause of their mouth problems and how to maintain good oral health, and provided peace of mind in terms of preventing future oral health problems. Other dental services, were unavailable at this clinic to meet all of the clients' oral health needs, and many participants voiced their need for affordable dental care, including Rachel:

I wish there's the same service you're getting for the hygiene thing if we could have like, free dentist ... even if it's gonna take a long time, if it's gonna be ... in a school setting, it's okay as long as [my mouth problems] can be taken care of.

EFry staff also discussed how the lack of dental services hinders some clients from even accessing preventive care at this clinic, as Serena explained,

I've had one client and maybe another one [say] that it's quite basic and they're needing something a lot more, so you know again they take the information or whatever but they're like 'No they can't help me, I've got, you know, something more than that'.

While some participants were able to be connected to reduced-cost dental services through referrals from this clinic, Pam discussed how the clinic has not yet met her dental needs:

I used to have really, really nice teeth but then I got into, you know, using drugs and stuff and then that took all my time and then not going to the dentist for ten years ... I just never took care of myself in those ten years. And now that I have such bad teeth on the top ... I don't know how to go about finding out how to get them fixed right now, how much it'll cost ... So, if you guys could help me with that then I would say you guys have really helped me and changed my life for the better.

Participants were seeking services beyond what this clinic provided, including orthodontic services, extractions, restorations, and crowns, and many discussed that the cost of referred care precluded them from having their dental needs met and that they would only access the referred care when in pain. While participants were seeking other dental services, they ultimately had realistic expectations, as Lauren said, *“There’s only so much free stuff that they can do for you, right? I mean if you wanna get like surgery, or fillings, or root canals you can’t because, that’s not what you guys do, right?”*

3.3.4 Acceptability

3.3.4.1 Respect and attention

Participants valued their interactions with the dental hygiene students and clinic instructor and perceived them to be respectful and attentive. Participants valued being called by their name and felt respected in terms of how they were greeted, as Lauren said, *“Last time I was there [the clinic instructor] remembered me...she’s like ‘Oh yeah, I know you from before’, and yeah, I really like her.”* Respectfulness was further demonstrated through the provision of clear explanations about the time needed to complete care and oral procedures to be performed, as Rachel noted, *“... they always tell you what they are gonna do”*, and Carrie described why she values such explanations:

I care about my body. I want to know what goes on, everything... Every part of my body, my mouth is very important, my teeth are important, an important part of my physique. In my opinion, in general, if a person is performing this type of invasive procedure in someone else's body, explanations should be given, except for urgent or emergency situations.

Participants also valued attention during appointments, as Jamie said, *"They didn't leave me sitting in the chair to go and do anything else. The attention was constant."* Melanie further described how the students were attentive by frequently checking in to ensure her comfort: *"[The student] constantly asked me if I was okay, how I was doing, like she really did try and be gentle. She wasn't just like zoning in and working away at it like it was a sculpture ... She knew there was a person behind those teeth."*

The hour and a half appointment length was acceptable for participants because, as Sabrina said, *"my teeth condition needs the time"*, and also because this longer appointment relayed attentive care, as Clara said, *"When they take their time you feel like it's more thorough, like they really took that extra time to make sure everything was done properly."* Attentive care provided during appointments also mitigated feelings of being rushed as experienced in other dental clinics, as Clara further explained,

... we kind of all feel it when sometimes you go to a dentist's place where we just feel rushed, and then there's anxiety, and there's stress, and [my children] act up because they feel that also ... we didn't feel any of that when we came in.

3.3.4.2 No judgment

Participants valued that they were not judged or looked down upon because of who they are. Allie, for example, did not feel judged due to her gender: *"When they know I'm transgender*

they don't [make me] feel [like] I'm [a] different person to any person here... They wanna make sure I'm okay." Melanie was relieved she was not judged for the condition of her dentition or income level:

They didn't look grossed out when they saw how unclean my teeth were ... you always worry about how they're gonna react, when they look in your mouth and see the neglect ... They didn't treat me as if I was any lower than they were. Like coming in off of lower cost level ... I didn't feel judged.

However, Melanie later described an experience at the clinic in which she felt subtly judged because she felt she was perceived as not being able to afford the referred dental care:

[The student] said we could talk about [a referral] after and then we just didn't. ... I think I even felt discouraged before even knowing anything ... she said it would cost still like at least a hundred dollars a month, probably on some payment plan. So I don't know, she just figured I couldn't afford that or, I'm not really sure why.

Staff also described how the clinic's location at EFry created a low-barrier and less judgmental environment compared to typical dental clinics, as Daniela discussed,

... I've heard from some of my clients that had to go access a dentist and call, and even just to make that phone call there's that barrier there, there's that judgment that they hear on the other end of the phone. So, to actually come here and know that... it's a safe environment, you know, it's part of the EFry program.

Serena similarly noted how clients may have difficulties attending referrals at other dental clinics due to acceptability considerations:

... I think the fact [the clinic is] in our building ... makes a big difference ... Part of the

issue with when you guys make referrals, and then clients don't go to the referrals, it's that they don't want to or that they can't take that extra step to get themselves in that other location.

3.3.4.3 The physical environment

Participants held mixed attitudes about the environment of the clinic being within a women's drop-in centre. Most participants accepted the environment, and Rachel noted her familiarity with the drop-in centre as a reason for attending this clinic: “[The clinic feels] at home ... this is my second home ... I used to be here every single day”. Other participants were not as accepting about the clinic environment, as Melanie explained,

I was expecting ... sort of a good set up, and I saw what they had to work with. I did feel a little bit more uncomfortable. Just because I was thinking ‘is this actually sanitary enough?’ ... Like their tools look shiny and they got a tray, but the floor looks ... well used ... But you get past that and you realize what they're doing for the greater cause.

Participants did not experience privacy issues with the clinic's set-up, however some discussed that other clients may have privacy concerns, as Melanie described,

I think normally in a normal dentist, I think you hear other people's consultations ... but I think this one is a little less private ... the other patients I felt bad for because I could hear like, they were trying to explain what they were doing and they were being very good about it, but they're like, ‘yeah, but there's a little bit of pus coming out, and that's what you're feeling.’ ... for me to hear that there's pus coming out of somebody else's mouth I would feel a little bit embarrassed if I was in her shoes. So, I wondered how she felt about the privacy, but I was fine.

Participants regarded the clinic as dimly lit and small in size but accepted that, as Lauren said, “*you have to make do with what you have*”. Participants perceived the small size to be mostly problematic for the dental hygiene students as they needed to navigate a small space, and some perceived such navigation problems to impact the length of the appointments.

3.3.5 Accommodation

3.3.5.1 Communication

This clinic is organized to accept clients over-the-phone or in-person, and clients perceived the availability of walk-in appointments as accommodating. Both client and staff participants discussed difficulties with communicating over-the-phone, as Serena noted that there is “*a disconnect in clients trying to connect with the students and get appointments made or things sorted out, or information clearly conveyed between the two sides.*” Clara discussed how the availability of walk-in appointments was accommodating for her in spite of such communication difficulties:

I think we had a little bit of difficulty with [making an appointment]. My support worker was trying to call ... she left a message, and no reply back. So I kind of just showed up. And I guess there was an available spot where someone didn't show up. So I was lucky to get in.

Since the clinic is only open on Wednesdays, the limited operation hours made it difficult for dental hygiene students to contact clients in a timely manner, and staff discussed how this could be unaccommodating for clients’ often transient lifestyles, as Serena explained,

... if they are having to wait that whole week or something to have someone respond to their call, you know, a week later the client might not even remember making that phone call ... or be around anymore!

Clients also expressed difficulties communicating over-the-phone but did not perceive these difficulties as problematic, although one participant was frustrated because they ended up communicating with the students through voicemails.

Staff discussed also how their clients may have difficulties communicating with a referred clinic, as Rachelle highlighted, *“If [the referral] was for a specific cause in the mouth, they might not know the words to use to say that.”* Serena further discussed how clients can be accommodated through the referral process:

What I think could make a difference ... is that we don't do it for them but that we support them in doing it ... We might write some notes about what they would say on the phone if they're nervous about that – ‘I don't know how to talk to this person’, ‘what do you say?’.

3.3.5.2 Clients' unique needs

Participants appreciated that the dental hygiene students accommodated for their unique needs. Melanie described how the students considered her children during appointments: *“they watched [my children] for me outside of the working room ... I don't think any other dentistry place would have been able to do that.”* Sabrina also described how the clinic instructor was accommodating to her care needs because she performed maintenance care during the summer when the students were unavailable: *“I get extra, extra, extra care and in the summer time [when] the students [are] not here [the clinic instructor] come here to clean my teeth! ... Big plus.”*

3.3.6 Awareness: Appropriate messaging

Participants became aware of this clinic through volunteering at EFry, from support workers, from word-of-mouth at a women's shelter within the EFry building, and from posted

flyers. However, overall awareness of the clinic seemed to be poor due to how the clinic is promoted. Participants noted that other EFry clients were unaware of the clinic. Staff said that some clients have low English literacy and cannot understand information on clinic flyers. Participants also described that other clients assume that the preventive services offered at the clinic cannot meet their high oral health needs, as Amy explained, “... *they were all like ‘well I can’t use that service’ ... they weren’t aware that they could just meet and discuss their personal situations, or get a cleaning*”. Lauren noted also the relatively discreet location of the clinic and wondered whether “*people are confused ‘cause it’s in the basement*”, and staff members further explained how the location of the clinic is made unclear from the clinic flyers, precluding access for clients, as Daniela described,

I did get feedback just the other day from one of the clients. She’s been here for a number of months now. And she just said she just saw the signs and just realized that it was held here in the building ... she saw UBC and first she thought it was at UBC so then from there she just, you know didn’t continue to investigate or read further. And then she didn’t know where the drop-in was.

Staff explained also that clients may be wary to seek care based on how the clinic is promoted, as Serena explained, “*We put up all these posters everywhere but a lot of our clients aren’t reading those posters. Or they just see, you know, certain words like ‘UBC’ or ‘students’ and so they don’t take in that information.*” Both client and staff participants discussed methods to better inform other clients about the clinic including having dental hygiene students facilitate face-to-face information sessions for clients and staff. Serena also noted the power of peer influence: “*If [clients] can talk to other clients who have gone [to the clinic] you can see a shift in their attitude.*”

Chapter 4: Discussion

This study aimed to describe a population of women impacted by the CJS attending the community-based dental hygiene clinic at EFry and identify how this clinic has addressed their preventive oral health needs and influenced access to preventive oral care. The services provided at this clinic included periodontal therapy, fluoride varnish, and oral health education and were able to address clients' preventive oral care needs. The clinic's affordability and convenience facilitated access to preventive oral care, since public dental benefits were insufficient to cover the cost of oral care and women struggled to accommodate the cost of oral care and transportation into their budgets. The respectful, attentive, and non-judgmental quality of the care providers further facilitated access. The unavailability of comprehensive dental services at this clinic, access barriers to referred dental care such as cost and perceived judgment, clinic communication strategies, and strategies used to promote the clinic may have hindered access to oral care. I discuss the themes from the qualitative analysis together in relation to findings from clients' dental charts, the satisfaction surveys, and relevant literature. I chose not to frame my discussion based on the themes from the qualitative analysis so the relationships between themes could be highlighted.

4.1 Addressing Preventive Oral Care Needs

In terms of women's preventive oral care needs, caries prevalence among women (62.0%) was much higher than that among females in the general population (16.1%) (Health Canada, 2010) but lower than another study involving incarcerated individuals (75%) (Rouxel et al., 2013). The prevalence of periodontal disease was slightly higher than the general population and comparable to those with low income in Canada; compared to the prevalence of mild (40.7%), moderate (20.9%), and severe (9.3%) periodontitis among women at this clinic, 47.7%,

21.5%, and 9.0% of those with low income in Canada have mild, moderate, and severe periodontitis, respectively (Health Canada, 2010). Some women at this clinic had previous access to restorative care as over half had existing restorations. Women whom I spoke with told me that the services provided at this clinic were able to meet their preventive oral care needs, but some still required dental services. While students provided referrals to trusted, low-barrier clinics located in the clients' own neighbourhoods, attendance of referrals was poorly documented and women whom I spoke with said they would not attend a referral unless they were in pain due to the cost of care. Other access-related factors may have also influenced clients' attendance of referrals including cost of transportation, fears about going to an unfamiliar clinic, fear of stigmatization, and regarding dental care as a low priority. EFry staff further said that women might have difficulties navigating the referral process, specifically in terms of communicating with other dental care providers and suggested the value in students guiding women through the referral process.

4.2 Women's Financial Situations

Affordability and accessibility of, and availability of services at, the dental hygiene clinic at EFry and their influence on access to care were closely linked; women whom I spoke with discussed how the cost of oral care and transportation and the availability of comprehensive services related to access within the context of their financial situations. Many of the women whom I interviewed experienced difficulties with paying for oral health services and expressed that even reduced-cost dental services provided through referrals would be difficult to accommodate financially. Thus, while dental services were available to women through referrals, affordability considerations precluded their ability to have their dental needs addressed. The cost of oral health care is a major barrier to access for Canadians, as 17.3% of those in the general

population in Canada avoid visiting the dentist due to cost (Canadian Academy of Health Sciences, 2014). About half of the women at this clinic received some form of public dental benefits, most often through their engagement with the Ministry of Employment and Income Assistance which provides dental coverage to those receiving income assistance, including PWD (Shaw & Farmer, 2015), indicating that this population financially relies on income assistance and likely struggles to secure stable and sufficient employment. The women whom I spoke with who received public dental benefits said that their benefits are limited and do not financially support all of their oral care needs, and also discussed how their fixed income precludes their ability to afford not only oral health services but also transportation to these services. This is unsurprising given that the majority of those impacted by the Canadian CJS live at or below the poverty line (Ivanova, 2011) and transportation and care costs are the main reasons people with low-income avoid the dentist (Wallace & Macentee, 2012). The cost of care and transportation are also barriers to oral care access for people who experience homelessness (Paisi et al., 2019), an important consideration since three women at this clinic were homeless and others likely had unstable living situations as some women resided in an emergency shelter.

While transportation was identified as a general access barrier for those who lived further away, women whom I spoke with were willing to accommodate for transportation costs to this clinic, suggesting that other access-related factors besides affordability influenced this population's willingness to attend the clinic. Many women discussed the limited availability of oral health services in the community that do not require out-of-pocket payment, suggesting that this clinic presented a unique opportunity for women to receive preventive oral care which would otherwise be unaffordable for them. The realistic expectations that women held about the

services offered at this clinic also suggest that women were happy to receive any type of oral care, as long as they did not need to pay out-of-pocket for the services.

4.3 Provider Characteristics

The women whom I spoke with valued the personable care they received at this clinic, particularly being respectfully greeted by name and receiving close attention. For those who are marginalized, approachable and friendly dental care providers can help facilitate access to oral care (Caton et al., 2016). Women involved with the CJS often experience fragmented health care and transient relationships with health care providers (Abbott et al., 2017); seventy-four women (79.6%) at this clinic did not have a dentist upon intake, suggesting that the majority of this population do not have a dental home. Being greeted by name could have relayed to women that they are truly valued as clients of this clinic. Women also appreciated that the clinic was accommodating in that they received continued preventive oral care while the community-engaged learning program was out-of-session, and this may similarly have reflected to women a genuine concern for their wellbeing.

Women expressed that being closely attended to during appointments relayed thorough care, and they appreciated not being rushed during appointments as they have experienced this when accessing oral care elsewhere. Women who are impacted by the CJS, particularly those who are transitioning from incarceration to the community, are often over-loaded with competing demands including managing health, mental health, and past trauma, securing education, employment, and safe and affordable housing, and reuniting with and caring for children (Richie, 2001). These competing demands likely limit the time and energy that women have for self-care; the slower care and relatively long appointment length at this clinic could have been a unique opportunity for women to feel like they were being taken care of.

4.3.1 Person-Centered and Trauma- (and Violence-) Informed Care

Women valued the respectful context in which dental hygiene care was provided, indicating that person-centered care (PCC) was an important facilitator of access related to acceptability. PCC can be defined as “a holistic (bio-psychosocial-spiritual) approach to delivering care that is respectful and individualized, allowing negotiation of care, and offering choice through a therapeutic relationship where persons are empowered to be involved in health decisions at whatever level is desired by that individual who is receiving the care” (Morgan & Yoder, 2011, p. 8). Respect is a crucial aspect of PCC, and it relays to individuals that they are competent to make decisions about their care and have the right to do so (Morgan & Yoder, 2011). Empowerment is also a component of PCC, and can be relayed by effectively communicating with individuals to include them in their health care decision-making (Morgan & Yoder, 2011). Individuals can feel neglected and powerless if dental care providers do not adequately communicate the details of their care (Brondani et al., 2017). Women expressed to me that they valued being given explanations about the oral care procedures to be performed, and these explanations may have relayed respect towards the women’s abilities to make decisions about their care and also empowered women by including them in the care process.

Women whom I spoke with and women who completed a satisfaction survey valued being given explanations about the preventive oral care procedures that students performed. Although the women whom I spoke with did not discuss past experiences of trauma, one woman who completed a satisfaction survey indicated that it is important for the students to provide explanations about oral care procedures since women at this clinic may have experienced past trauma (Table 7). Considering that women who are involved with the CJS have often experienced abuse or other trauma (Covington, 2007; Hayes, 2015), it is imperative for oral

health care providers to practice trauma-informed care (TIC) when providing care for this population. Dental hygiene students at the EFry clinic provide TIC, which can be defined as “care in which every part of service is assessed and potentially modified to include a basic understanding of how trauma impacts the life of an individual seeking services” (Raja, Hoersch, Rajagopalan, & Chang, 2014). The mouth can be a very sensitive area and for individuals with past experiences of trauma, touching of their body by a dental care provider can retrigger trauma memories (Raja et al., 2014). Furthermore, for women who have experienced abuse, fear may be invoked during dental appointments due touching of the mouth, head, or neck and performing treatment without warning (Leeners et al., 2007). Informing individuals about the oral care procedures being performed is an important aspect of communication within a TIC approach (Raja et al., 2014), and can help individuals who have experienced trauma feel a sense of control over their body (Elliott, Bjelajac, Fallot, Markoff, & Reed, 2005).

Recently, there has been a shift from TIC to trauma- and violence-informed care (TVIC), which emphasizes trauma imposed specifically by experiences of violence (Ponic, Varcoe, & Smutylo, 2016). TVIC also calls for service providers to not only consider an individual’s past experiences of violence, but also ongoing violence they may experience and its influence on trauma (Ponic et al., 2016). It is important that those providing oral health care for women impacted by the CJS are aware of the violence that this group may experience, especially domestic violence, as injuries to the head, neck, and face region are the most common injuries of domestic violence (Hendler, 2007). Oral health care providers should be prepared to intervene in a confidential and non-judgmental way if they suspect experiences of violence (Hendler, 2007).

Being informed about the length of appointments is also an important part of communication in an oral health care setting (Wener, Schönwetter, & Mazurat, 2011). Women

whom I spoke with perceived the explanations they were given regarding the time needed to complete care as acceptable, however some women who completed client satisfaction surveys were less satisfied with such explanations. The discrepancy between perceptions about timely communication could be due to participant sampling, as women who had negative experiences at the clinic may have been less willing to participate in the interviews. Some women may have been less satisfied with communication related to time because, while women valued receiving slower and thorough care, they prefer to know how long care will take so they can schedule an appointment within their already demanding lives. Communication related to time may have also been important for women who experience dental anxiety or fear, since such information can help mitigate dental fear (Armfield & Heaton, 2013).

4.3.2 Stigmatization

Women discussed how not being judged for the condition of their dentition, income-level, gender, or other factors facilitated access to care at the EFry clinic. This finding is unsurprising considering that those from marginalized groups, including those who are lesbian, gay, bisexual, and transgender (Aguilar & Fried, 2015) and women who have experienced homelessness or incarceration (Ahmed, Angel, Martell, Pyne, & Keenan, 2015) often face barriers including stigmatization and discrimination when accessing health care, and value service providers who are non-judgmental and sensitive to their needs. One woman whom I interviewed felt judged for having low income due to poor client-student communication, indicating that dental hygiene students providing care for this population must be sensitive to both the overt and subtle ways in which judgment may be relayed. PCC, particularly open communication and including women in the decision-making aspects of their care, may help mitigate such perceived feelings of judgment (Brondani et al., 2017).

EFry staff whom I spoke with also discussed that perceived stigma from other dental care providers may have impeded access to referred dental care. Individuals involved with the CJS may avoid accessing health care due to stigma; those who experience homelessness may be fearful of attending the dentist and feel disrespected and stigmatized because of their lack of housing and poor oral health (Mago et al., 2018), and individuals who have experienced incarceration may forego disclosing their incarceration history due to fear of being stereotyped or treated differently by health care providers (Abbott et al., 2016). The dental hygiene clinic at EFry mitigated the need for women to disclose their housing situation or incarceration history, and although referral attendance was poorly documented it is possible that women did not attend referred care because of fear of stigmatization due to marginalizing factors including income status, housing situation, or incarceration history.

4.4 Clinic Organization

The organization of the clinic at EFry influenced access to preventive oral care related to acceptability and accommodation. EFry staff discussed how the familiarity and approachability of the clinic location at EFry facilitated access related to acceptability, similar to Caton et al. (2016) who found that the location of a community dental service within community drop-in centres for individuals experiencing homelessness fostered non-threatening and familiar environments at which clients could access care. Some physical aspects of the clinic environment may have impeded access; while women whom I spoke with were understanding about the space available, they, as well as women who completed a satisfaction survey, preferred clinic environments that were larger, had brighter lighting and more comfortable dental chairs, and were aesthetically appealing in terms of cleanliness. Although this was not discussed by women whom I interviewed, women's preference for a larger space could relate to past experiences of

trauma, as those who have experienced trauma may be triggered by enclosed spaces (Elliott et al., 2005). Other women may thus not have attended at this clinic due to concerns about these clinic factors, including the limited privacy available as discussed by one woman whom I interviewed. It is also possible that some women did not attend this clinic due to low comfortability with seeking care at a more casual health care site. My findings suggest women from this population may be more comfortable accessing care at a clinic that is community-based and approachable in terms of location and provider characteristics but also reminiscent of a typical health care clinic in certain physical aspects such as clinic size, lighting, and aesthetics.

4.4.1 Communication Strategies

Miscommunication between students and clients seemed to impede access at this clinic related to accommodation. Women whom I interviewed or who completed a satisfaction survey struggled to contact the students about appointments and information throughout the week while the students were not at the clinic. It is also possible that women inquiring about the EFry clinic experienced similar difficulties contacting students, thus precluding them from initiating contact with the clinic. The availability of walk-in appointments however seemed to mitigate these communication challenges, as the clinic was flexible in terms of accommodating for women's schedules. Caton et al. (2016) similarly found that attendance of a community-based dental clinic for individuals experiencing homelessness was influenced by the clinic's ability to accommodate for clients' chaotic lives, including not penalizing clients for missing appointments and accommodating for walk-in appointments.

Miscommunication was also evident in the retrospective chart review. The reasons for clients not attending re-care was poorly documented since many clients did not have working

phone numbers at which to be contacted. It is likely that transiency and day-to-day demands experienced by women contributed to poor re-care attendance.

4.5 Advertisement for the Clinic

Finally, advertisement for the clinic seemed to hinder access related to awareness. Women told me that other clients are not well-informed about the scope of services offered, and EFry staff said that the clinic information flyers could be unclear for women who are unfamiliar with the EFry building, ineffective for those who have low English literacy, or intimidating for women who are uncomfortable with a university-affiliated clinic. Women might have been uncomfortable seeking care from a research institution due to negative perceptions about research institutions or they may have been wary to receive care from students versus registered dental hygienists. Apart from clients who attended the clinic, other women at EFry might thus have been unaware of or unwilling to attend the dental hygiene clinic because of the way it was promoted.

Chapter 5: Limitations, Significance, Future Recommendations, and

Conclusion

5.1 Limitations

The generalizability of my findings is limited by the convenient sample. The use of convenience sampling limits participation to clients who attend this EFry location regularly, such as those who live in the building or who utilize the drop-in centre. Thus, my sampling method was unable to reach clients who are not often at this EFry location, including those who live off-site and those who mostly use programs and services at other EFry locations in the Greater Vancouver area. The generalizability of my findings are also limited to describe access to preventive oral care only for women impacted by the CJS who attend EFry, not all women impacted by the CJS in the Greater Vancouver area; it is likely that women in my study have relatively good access to support services compared to other women impacted by the CJS in the Greater Vancouver region who do not utilize community supports similar to EFry.

My findings are also limited by my small sample, although I believe that the number of focus groups and interviews I conducted was adequate to achieve data saturation since I was identifying redundant and unsurprising data by the second phone interview. Due to the monetary honorarium and food provided to participants, I assumed that there would be greater interest in participation in the focus groups. Unexpected low participation in the focus groups could have impacted the data collected; group interaction was likely minimized during the two focus groups conducted with only two clients each. Individual interviews seemed to be better suited than focus groups for this population. Some women might have been fearful of losing access to the clinic or other EFry services if they disclosed negative information about the clinic, and thus decided to

not participate, and those who did participate might have biased their views toward a more positive appreciation of the dental hygiene services. The unstable living conditions of this population could have also impacted women's abilities to follow through with participation, which was evident when two women who initially confirmed their participation were unable to attend a focus group. Thus, extra patience should be exercised when recruiting research participants from this group. Participant attendance should be confirmed if possible and researchers should anticipate no-shows by recruiting more participants than necessary and allowing adequate time for recruitment if using focus groups as the method of qualitative data collection. It would also be beneficial to ask women at the time of recruitment whether they would prefer to participate in a focus group or an individual interview, either in-person or by phone. Being accommodating towards women's preferences may help women feel more comfortable with participating in research and encourage their follow-through with participation.

My findings are further limited by the data collection methods used. Sixty-two client satisfaction surveys were reviewed however clients may have completed more than one survey as they are completed anonymously. Findings from these surveys may thus be biased toward more positive or negative feedback depending on the satisfaction levels of clients who completed multiple surveys. Moreover, some women who completed a satisfaction survey were less satisfied with the provision of referrals for additional care. Lower satisfaction of referrals could either have been due to the cost of care, or because there was no other option on the survey to indicate that the client received no referral. Thus, women who did not receive a referral, which makes up 64.1% of the adult clientele at this clinic, may have simply ranked this factor as lower in satisfaction. The collation of data obtained from focus groups and phone interviews could

have also limited the data collected, as phone interviews may elicit more sensitive information compared to in-person interviews (Novick, 2008).

5.2 Significance

My findings show that access to preventive oral care for women impacted by the CJS at EFry is largely influenced by financial barriers. The dental hygiene clinic at EFry was able to facilitate access by removing out-of-pocket care expenses, illustrating the need for oral health services to be accommodating towards clients with low-income, specifically those receiving public dental benefits, in order to facilitate access for this population. It is also important that oral health care providers have knowledge about the trauma and stigmatization faced by women impacted by the CJS and practice PCC and TIC. Finally, my findings emphasize the need for oral health services and oral health care providers to accommodate for the lifestyles of this population. The unstable and potentially demanding lives of women impacted by the CJS call for oral health services to be flexible in terms of appointment scheduling and for oral health care providers to communicate to clients the time needed for care. Similarly, researchers engaging women from this group in their research should be accommodating towards women's preferences for participation. Oral health care providers should further accommodate for this group by providing guidance in navigating the dental care system.

5.3 Future Recommendations

My findings highlight recommendations for the prospective dental clinic at EFry to improve access to oral care for women impacted by the CJS. To further facilitate access to oral care for women at EFry, the prospective dental clinic should be designed in a way that is aesthetically appealing in terms of cleanliness. In light of my findings, EFry has moved the current dental hygiene clinic into a new space within the same building, which is larger in size,

has brighter lighting, and offers more privacy for clients. Alternative clinic communication strategies should also be considered. While students are not at the clinic, EFry staff could be involved with scheduling appointments for clients to mitigate timely communication problems posed by the clinic's limited operating hours. Involving EFry staff more closely in the operation of the clinic may further strengthen the community-university partnership between EFry and UBC. Improved communication between students and clients could also help facilitate wrap-around care. Students can further accommodate for this group by providing written oral self-care resources and guiding women through the referral process, for example by providing written instructions regarding how to contact referrals.

Alternative clinic advertisement should also be considered. To mitigate worries clients might have with seeking care at a university-affiliated site, clinic advertisement should be modified to shift the emphasis from the clinic being affiliated with UBC to being affiliated with EFry. Moreover, face-to-face information sessions with clients and staff may be a more effective strategy to relay information as it would allow women to have their questions answered immediately, thus mitigating miscommunication issues related to the messaging on flyers or difficulties contacting students throughout the week. Informing women about the clinic face-to-face might also help build familiarity and trust between clients and students. The use of peers may also be an effective strategy to help motivate other clients to attend the clinic, as suggested by EFry staff, and help women navigate the referral process; Paisi et al. (2019) similarly suggested that access to dental care for those experiencing homelessness could be improved by the use of peer advocates to help individuals navigate and attend dental services.

My findings also show that it is important that oral care providers accommodate for clients who receive public dental benefits. Educating dental and dental hygiene students through

community-based programs that engage with marginalized populations such as women impacted by the CJS may help foster social responsibility and influence students to continue providing care to these groups after graduation, through a commitment to accept clients who receive public dental benefits or through pro-bono work.

Future research could evaluate the impact of this community-engaged program on clients' oral health, to identify how this program has impacted variables such as gingival or periodontal status, caries incidence, oral health knowledge, or oral health behaviours. Additionally, future research could explore how the prospective dental clinic at EFry influences access to oral care, as this research would enhance our knowledge of how this group's comprehensive oral care needs can be appropriately addressed within a community-based setting.

5.4 Conclusion

The dental hygiene clinic at EFry facilitated access to preventive oral health care for a subset of women impacted by the CJS in the Greater Vancouver region. These women were mostly middle-aged and had an oral health status comparable to those with low-income in Canada. The clinic was able to address women's preventive oral care needs through the provision of on-site dental hygiene services, and although the clinic provided referrals for dental care, women still experienced barriers with accessing dental care likely due to financial barriers and concerns related to stigmatization from other oral health care providers. The close proximity of the clinic and the services offered for which women did not need to pay out-of-pocket allowed women to access preventive care that would otherwise be inaccessible due to difficulties accommodating for the cost of care and transportation in their fixed low incomes. Moreover, the PCC and TIC provided by the students helped women feel comfortable accessing care at this clinic. To further facilitate access for this group, the prospective dental clinic at EFry should

consider the importance of aesthetics when designing the clinic, appointment communication systems should be altered to be more accommodating to the lifestyles of women from this group, students or peers could guide women through the referral process to help facilitate improved access to dental care, and awareness of the clinic should be improved by altering clinic advertisement.

Tables

Table 1 Demographic characteristics of adult and children clients (n=99)

Characteristic	Number of clients	% of clients
Gender		
Female	92	92.9
Male	0	0
Unspecified	7	7.1
Location of residence		
Within the EFry building	39	39.4
Shelter housing	15	15.2
Transition housing	14	14.1
Unspecified	10	10.1
Within the city	21	21.2
Outside the city	33	33.3
Homeless	3	3.1
Unspecified	3	3.1
Academic year enrolled		
2014-2015	40	40.4
2015-2016	35	35.4
2016-2017	24	24.2

Table 2 Health provider status and dental insurance status of adult clients

Characteristic	Number of adult clients	% of adult clients
Has a physician (n=92)		
Yes	54	58.7
No	38	41.3
Has a dentist (n=93)		
Yes	19	20.4
No	74	79.6
Dental insurance (n=92)		
None	39	42.4
Persons with Disabilities	25	27.2
Social Service Benefits	15	16.3
Private/Personal Insurance	9	9.8
Non-Insured Health Benefits	6	6.5
Correctional Service Canada	1	1.1

Table 3 Intake oral health status of adult clients

Oral health variable	Number of adult clients	% of adult clients
Carious lesions (n=87)		
1	17	19.5
2 to 3	18	20.7
4 to 5	11	12.6
6 or more	8	9.2
Mobile teeth (n=88)		
1	4	4.5
2 to 3	6	6.8
4 to 5	0	0
6 or more	5	5.7
Fractured teeth/restorations (n=88)		
1	21	23.9
2 to 3	7	8.0
4	2	2.3
Oral lesions (n=89)		
1	4	4.5
2	4	4.5
Existing restorations (n=88)		
Composite restoration	53	60.2
Amalgam restoration	59	67.0
Full gold crown	9	10.2
Porcelain fused to metal crown	9	10.2

Table 4 Preventive oral health services received by adult clients (n=92)

Oral health service	Number of adult clients	% of adult clients
Oral assessment		
Started	89	96.7
Completed	86	93.5
Periodontal therapy	78	84.8
Oral health education	68	73.9
Fluoride varnish	64	69.6
Sealants	7	7.6
Temporary restorations	6	6.5
Referral	33	35.9
Suspected caries	16	17.4
Fractured tooth	11	12.0
Dentures	7	7.6
Tooth pain	2	2.2
Suspicious oral lesion	1	1.1
Fistula	1	1.1
Mobile tooth	1	1.1
Root canal	1	1.1
Extraction	1	1.1

Table 5 Clinic attendance among adult clients

Clinic attendance factor	Number of adult clients	% of adult clients
Attended referral (n=33)		
Yes	3	9.1
No	5	15.2
Unknown	25	75.8
Attended a re-care appointment (n=64)		
Yes	24	37.5
No	40	62.5
Cancelled an appointment (n=92)		
Yes	10	10.9
No	82	89.1
No show to an appointment (n=92)		
Yes	18	19.6
No	74	80.4

Table 6 Percentage of respondents who indicated each satisfaction factor

Satisfaction factor	Agree/Partly Agree	Neutral	Partly Disagree/ Disagree
Respectful treatment (n=62)	100.0	0	0
Information is kept private and confidential (n=56)	100.0	0	0
Clear explanations about details of care (n=62)	100.0	0	0
Student had the equipment and supplies to complete my care (n=55)	98.2	0	1.8
Felt comfortable receiving care at this clinic (n=56)	94.6	1.8	3.6
This clinic improved oral health knowledge (n=56)	89.3	7.1	3.6
Clear explanations about time to complete care (n=62)	80.6	8.1	11.3
Ability to provide a referral (n=54)	72.2	22.2	5.6

Table 7 Examples of survey respondents' suggestions to improve the clinic and care

Satisfaction Factor	Comments
Clinic location	"A location closer to Vancouver"
Clinic environment	"I'm comfortable with student and instructor, however, the light and supplies is not enough"
	"needs better ceiling lighting"
	"Better arm rest supports"
	"Music is a healthy distraction"
Student-client communication	"Why we are checked for cancer. The feeling of face or throat (student professional) can feel uncomfortable. Also if every tooth gum must be poked-checked. My student was respectful, professional my question was about the reason for the procedure itself as we all have different life experiences."
	"Time estimate would be useful"
	"It would be nice to have a phone # to contact you throughout the week"
Having specialized oral self-care supplies	"Have some equipment needed by patient- did not have the reach brush for back teeth"
Providing written oral self-care resources	"A sheet from the student dentist about how to take care of my teeth maintaining oral health."

Table 8 Characteristics of clients who participated in focus groups and interviews

Pseudonym	Age (yrs)	Ethnicity	Education	Oral assessment	Oral health education	Periodontal therapy	Fluoride varnish	Sealants/temporary restorations	Referral
Sabrina	60	Chinese	High school	Y	Y	Y	Y	N	N
Rachel	55	African	University	Y	Y	Y	Y	Y	Y
Clara	38	Canadian	High school	Y	Y	Y	Y	Y	N
Carrie	52	South American	College	Y	N	Y	Y	Y	N
Melanie	33	Caucasian	Some university	Y	Y	Y	N	N	N
Lauren	48	Scottish	Some college	Y	Y	Y	Y	N	N
Jamie	60	Caucasian	College	Y	N	Y	Y	N	Y

Figures

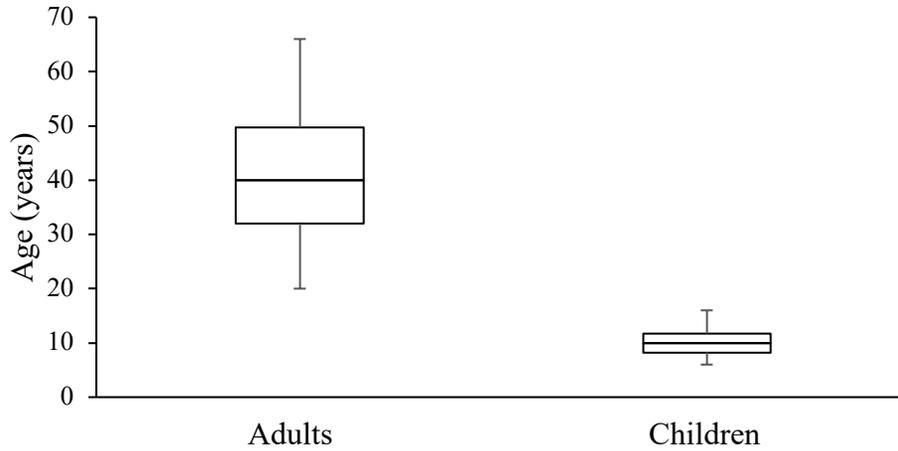


Figure 1 Age of clients (n=90)

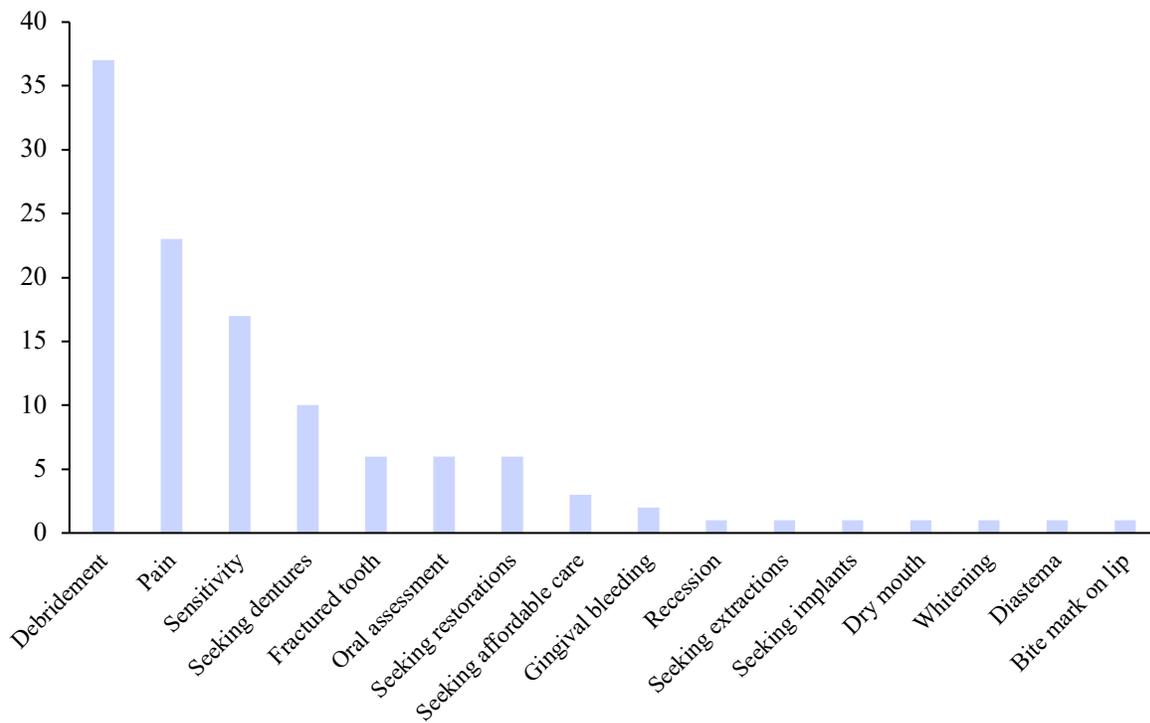


Figure 2 Reasons for attending the clinic among adult and children clients (n=86)

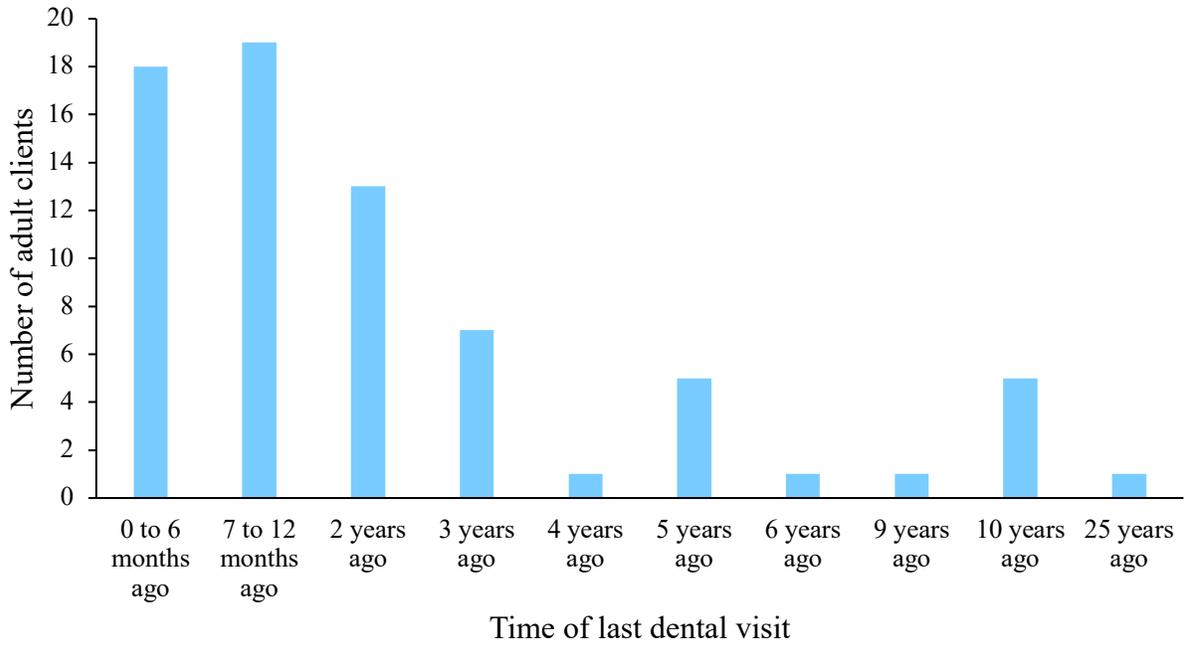


Figure 3 Time of last dental visit for adult clients (n=71)

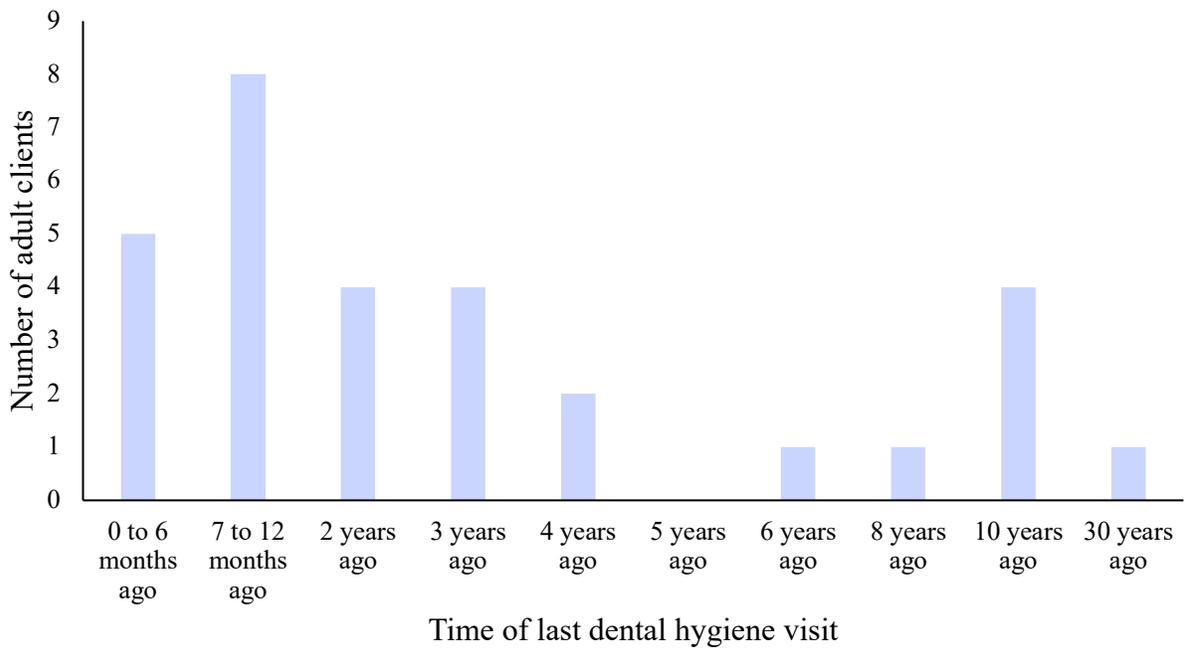


Figure 4 Time of last dental hygiene visit for adult clients (n=30)

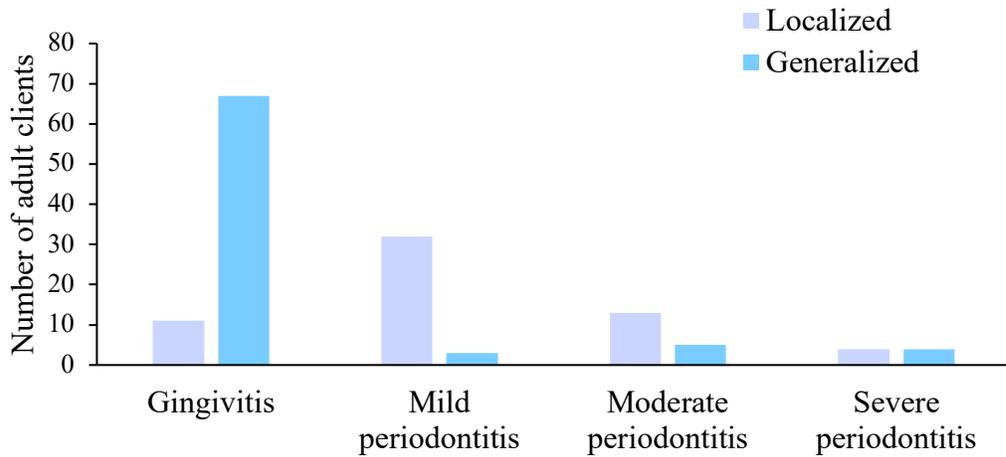


Figure 5 Gingivitis (n=81) and periodontitis (n=86) prevalence among adult clients

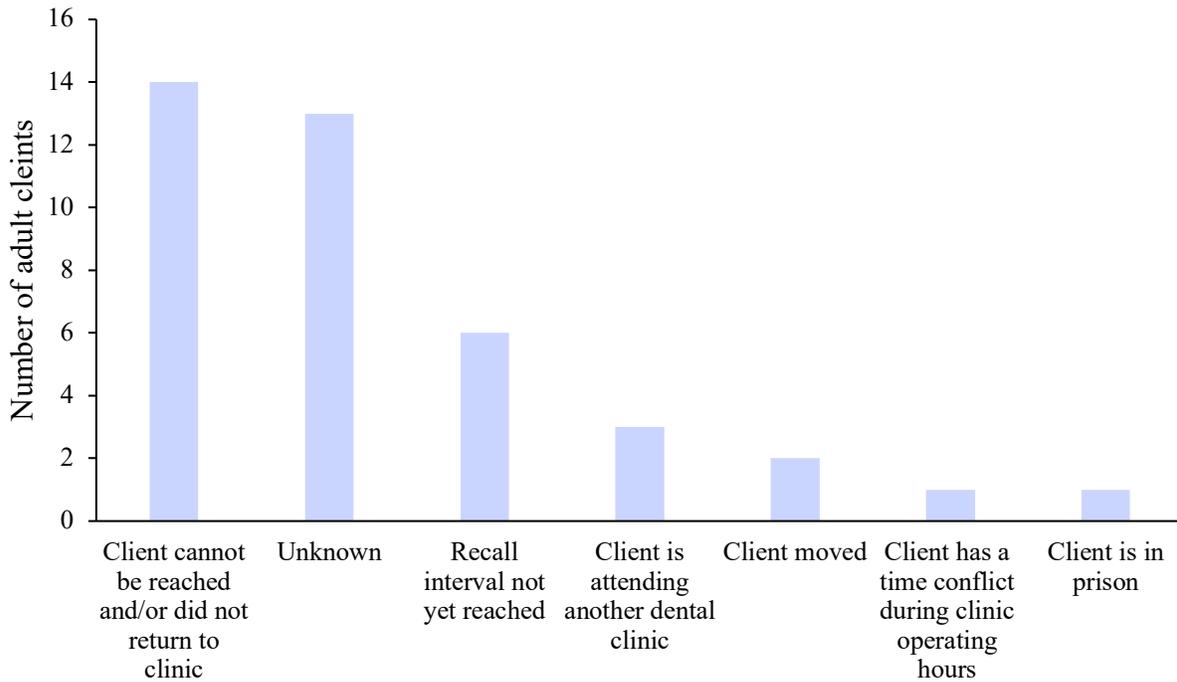


Figure 6 Reasons for not attending a re-care appointment among adult clients (n=40)

References

- Abbott, P., Magin, P., Davison, J., & Hu, W. (2016). 'If they're your doctor, they should care about you': Women on release from prison and general practitioners. *Australian Family Physician, 45*(10), 728-732.
- Abbott, P., Magin, P., Davison, J., & Hu, W. (2017). Medical homelessness and candidacy: women transiting between prison and community health care. *International Journal for Equity in Health, 16*(130), 1-10. doi:10.1186/s12939-017-0627-6
- Aguilar, E., & Fried, J. (2015). Enhancing dental and dental hygiene student awareness of the lesbian, gay, bisexual and transgender population. *Journal of Dental Hygiene, 89*(1), 11-16.
- Ahmed, R., Angel, C., Martel, R., Pyne, D., & Keenan, L. (2016). Access to healthcare services during incarceration among female inmates. *International Journal of Prisoner Health, 12*(4), 204-215. doi:10.1108/IJPH-04-2016-0009
- Ahmed, R. A., Angel, C., Martell, R., Pyne, D., & Keenan, L. (2015). The Impact of Homelessness and Incarceration on Women's Health. *Journal of Correctional Health Care, 22*(1), 62-74. doi:10.1177/1078345815618884
- Allen, S., Flaherty, C., & Ely, G. (2010). Throwaway Moms: Maternal Incarceration and the Criminalization of Female Poverty. *Affilia, 25*(2), 160-172. doi:10.1177/0886109910364345
- Armfield, J. M., & Heaton, L. J. (2013). Management of fear and anxiety in the dental clinic: a review. *Australian Dental Journal, 58*(4), 390-407. doi:10.1111/adj.12118
- Barbour, R. S. (2001). Checklists for improving rigour in qualitative research: a case of the tail wagging the dog? *BMJ, 322*(7294), 1115-1117. doi:10.1136/bmj.322.7294.1115

- Behar-Horenstein, L. S., Feng, X., Roberts, K. W., Gibbs, M., Catalanotto, F. A., & Hudson-Vassell, C. M. (2015). Developing Dental Students' Awareness of Health Care Disparities and Desire to Serve Vulnerable Populations Through Service-Learning. *Journal of Dental Education*, 79(10), 1189-1200.
- Binswanger, I. A., Nowels, C., Corsi, K. F., Long, J., Booth, R. E., Kutner, J., & Steiner, J. F. (2011). "From the prison door right to the sidewalk, everything went downhill," A qualitative study of the health experiences of recently released inmates. *International Journal of Law and Psychiatry*, 34(4), 249-255.
doi:<https://doi.org/10.1016/j.ijlp.2011.07.002>
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member Checking: A Tool to Enhance Trustworthiness or Merely a Nod to Validation? *Qualitative Health Research*, 26(13), 1802-1811. doi:10.1177/1049732316654870
- Bowen, G. A. (2008). Naturalistic inquiry and the saturation concept: a research note. *Qualitative Research*, 8(1), 137-152. doi:10.1177/1468794107085301
- Braithwaite, R. L., Treadwell, H. M., & Arriola, K. R. J. (2005). Health Disparities and Incarcerated Women: A Population Ignored. *American Journal of Public Health*, 95(10), 1679-1681. doi:10.2105/AJPH.2005.065375
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
- Bright, M. A., Alford, S. M., Hinojosa, M. S., Knapp, C., & Fernandez-Baca, D. E. (2015). Adverse childhood experiences and dental health in children and adolescents. *Community Dentistry and Oral Epidemiology*, 43(3), 193-199. doi:10.1111/cdoe.12137

- Brinkmann, S. (2017). German Philosophies of Qualitative Research: Phenomenology and Hermeneutics. In *Philosophies of Qualitative Research* (pp. 1-25). New York: Oxford University Press.
- Brondani, M. A., Alan, R., & Donnelly, L. (2017). Stigma of addiction and mental illness in healthcare: The case of patients' experiences in dental settings. *PLoS One*, *12*(5), e0177388. doi:10.1371/journal.pone.0177388
- Canadian Academy of Health Sciences. (2014). *Improving access to oral health care for vulnerable people living in Canada*. Retrieved from http://cahs-acss.ca/wp-content/uploads/2015/07/Access_to_Oral_Care_FINAL_REPORT_EN.pdf
- Canadian Association of Elizabeth Fry Societies. (2018). About Us. Retrieved from <http://www.caefs.ca/about-us/>
- Caton, S., Greenhalgh, F., & Goodacre, L. (2016). Evaluation of a community dental service for homeless and 'hard to reach' people. *British Dental Journal*, *220*(2), 67-70. doi:10.1038/sj.bdj.2016.56
- Charnock, S., Owen, S., Brookes, V., & Williams, M. (2004). A community based programme to improve access to dental services for drug users. *British Dental Journal*, *196*(7), 385-388. doi:10.1038/sj.bdj.4811193
- Colbert, A. M., Sekula, L. K., Zoucha, R., & Cohen, S. M. (2013). Health care Needs of Women Immediately Post-Incarceration: A Mixed Methods Study. *Public Health Nursing*, *30*(5), 409-419. doi:10.1111/phn.12034
- Correctional Service Canada. (2013a). Security Classifications. Retrieved from <http://www.csc-scc.gc.ca/security/001003-1000-eng.shtml>

- Correctional Service Canada. (2013b). Women's Facilities. Retrieved from <http://www.csc-scc.gc.ca/women/002002-0002-eng.shtml>
- Correctional Service Canada. (2014). Research Results - Aboriginal Offenders. Retrieved from <http://www.csc-scc.gc.ca/publications/005007-3027-eng.shtml>
- Correctional Service Canada. (2018). Community Supervision. Retrieved from <http://www.csc-scc.gc.ca/info-source/007007-1003-eng.shtml>
- Correctional Service Canada. (2019). Correctional Service Canada Healing Lodges. Retrieved from <https://www.csc-scc.gc.ca/aboriginal/002003-2000-en.shtml>
- Covington, S. S. (2007). Women and the Criminal Justice System. *Women's Health Issues, 17*(4), 180-182. doi:<https://doi.org/10.1016/j.whi.2007.05.004>
- Douglas, N., Plugge, E., & Fitzpatrick, R. (2009). The impact of imprisonment on health: what do women prisoners say? *Journal of Epidemiology and Community Health, 63*(9), 749-754. doi:10.1136/jech.2008.080713
- Elliott, D. E., Bjelajac, P., Fallot, R. D., Markoff, L. S., & Reed, B. G. (2005). Trauma-informed or trauma-denied: Principles and implementation of trauma-informed services for women. *Journal of Community Psychology, 33*(4), 461-477. doi:10.1002/jcop.20063
- Fazel, S., Yoon, I. A., & Hayes, A. J. (2017). Substance use disorders in prisoners: an updated systematic review and meta-regression analysis in recently incarcerated men and women. *Addiction, 112*(10), 1725-1739. doi:10.1111/add.13877
- First Nations Health Authority. (2012). *Healthy children, healthy families, healthy communities: BC provincial results 2008-10 First Nations Regional Health Survey*. Retrieved from http://www.fnha.ca/Documents/RHS_Report.pdf

- Flores, J. A., & Pellico, L. H. (2011). A Meta-Synthesis of Women's Postincarceration Experiences. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 40(4), 486-496. doi:10.1111/j.1552-6909.2011.01256.x
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, 204, 291. doi:10.1038/bdj.2008.192
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, 8(4), 597-606.
- Government of Canada. (2013). Important information for Non-Insured Health Benefits (NIHB) clients living in British Columbia. Retrieved from <https://www.canada.ca/en/indigenous-services-canada/services/first-nations-inuit-health/non-insured-health-benefits/benefits-information/health-benefits-under-first-nations-health-authority-fnha-questions-answers-health-canada.html>
- Government of Canada. (2018). Dental benefits. Retrieved from <https://www.canada.ca/en/indigenous-services-canada/services/non-insured-health-benefits-first-nations-inuit/benefits-services-under-non-insured-health-benefits-program/dental-care-benefits.html>
- Green, S., Foran, J., & Kouyoumdjian, F. G. (2016). Access to primary care in adults in a provincial correctional facility in Ontario. *BMC Research Notes*, 9, 131. doi:10.1186/s13104-016-1935-4
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage Publications, Inc. Retrieved from <https://scholar.google.ca>.

Harner, H. M., & Riley, S. (2013). Factors Contributing to Poor Physical Health in Incarcerated Women. *Journal of Health Care for the Poor and Underserved, 24*(2), 788-801.

doi:10.1353/hpu.2013.0059

Hayes, M. O. (2015). The Life Pattern of Incarcerated Women: The Complex and Interwoven Lives of Trauma, Mental Illness, and Substance Abuse. *Journal of Forensic Nursing, 11*(4), 214-222. doi:10.1097/JFN.0000000000000092

Health Canada. (2010). *Report on the Findings of the Oral Health Component of the Canadian Health Measures Survey 2007-2009*. Retrieved from

<http://publications.gc.ca/site/eng/369649/publication.html>

Health Canada. (2014). *A Statistical Profile on the Health of First Nations in Canada: Determinants of Health, 2006 to 2010*. Retrieved from

http://publications.gc.ca/collections/collection_2014/sc-hc/H34-193-1-2014-eng.pdf

A Health Care Needs Assessment of Federal Inmates in Canada. (2004). *Canadian Journal of Public Health, 95*(Supplement 1), S1-S63.

Heidari, E., Dickinson, C., & Newton, T. (2014). Oral health of adult prisoners and factors that impact on oral health. *British Dental Journal, 217*(2), 69-71. doi:10.1038/sj.bdj.2014.594

Hendler, T. J. (2007). Domestic Violence and its Relation to Dentistry: A Call for Change in Canadian Dental Practice. *Journal of the Canadian Dental Association, 73*(7), 617.

Hotton Mahony, T. (2011). *Women and the Criminal Justice System*. Retrieved from

<https://www150.statcan.gc.ca/n1/pub/89-503-x/2010001/article/11416-eng.htm>

Hotton Mahony, T., Jacob, J., & Hobson, H. (2017). *Women and the Criminal Justice System*.

Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-503-x/2015001/article/14785-eng.htm>

- Ivanova, I. (2011). *The Cost of Poverty in BC*. Vancouver: Canadian Centre for Policy Alternatives, Public Health Association of BC, Social Planning and Research Council of BC.
- Kelly-Scott, K., & Arriagada, P. (2016). *Aboriginal peoples: Fact Sheet for British Columbia*. Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-656-x/89-656-x2016011-eng.htm>
- Kouyoumdjian, F., Schuler, A., Matheson, F. I., & Hwang, S. W. (2016). Health status of prisoners in Canada: Narrative review. *Canadian Family Physician, 62*(3), 215-222.
- Krueger, R. A., & Casey, M. A. (2000). *Focus Groups: A Practical Guide for Applied Research* (3 ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Kulkarni, S. P., Baldwin, S., Lightstone, A. S., Gelberg, L., & Diamant, A. L. (2010). Is Incarceration a Contributor to Health Disparities? Access to Care of Formerly Incarcerated Adults. *Journal of Community Health, 35*(3), 268-274. doi:10.1007/s10900-010-9234-9
- Kvale, S. (1983). The qualitative research interview: A phenomenological and a hermeneutical mode of understanding. *Journal of Phenomenological Psychology, 14*(2), 171-196.
- Kvale, S. (1996). *InterViews: An Introduction to Qualitative Research Interviewing*. Thousand Oaks, CA: Sage Publications.
- La Prairie, C. (2002). Aboriginal over-representation in the criminal justice system: A tale of nine cities. *Canadian Journal of Criminology, 44*(2), 181-208.
- Laltoo, A. B. E., & Pitcher, L. M. (2012). Oral health needs of Canadian prisoners as described by formerly incarcerated New Brunswickers. *Canadian Journal of Dental Hygiene, 46*(3), 173-180.

- Lashley, M. (2008). Promoting Oral Health Among the Inner City Homeless: A Community-Academic Partnership. *Nursing Clinics of North America*, 43(3), 367-379.
doi:<https://doi.org/10.1016/j.cnur.2008.04.011>
- Leeners, B., Stiller, R., Block, E., Görres, G., Imthurn, B., & Rath, W. (2007). Consequences of childhood sexual abuse experiences on dental care. *Journal of Psychosomatic Research*, 62(5), 581-588. doi:<https://doi.org/10.1016/j.jpsychores.2006.11.009>
- Levesque, J.-F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: conceptualising access at the interface of health systems and populations. *International Journal for Equity in Health*, 12(1), 18. doi:10.1186/1475-9276-12-18
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.
- Lopez, K. A., & Willis, D. G. (2004). Descriptive Versus Interpretive Phenomenology: Their Contributions to Nursing Knowledge. *Qualitative Health Research*, 14(5), 726-735.
doi:10.1177/1049732304263638
- Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, 16(2), 193-205.
- Mago, A., MacEntee, M. I., Brondani, M., & Frankish, J. (2018). Anxiety and anger of homeless people coping with dental care. *Community Dentistry and Oral Epidemiology*, 46(3), 225-230. doi:10.1111/cdoe.12363
- Malakieh, J. (2018). *Adult and youth correctional statistics in Canada, 2016/2017*. Retrieved from <https://www150.statcan.gc.ca/n1/pub/85-002-x/2018001/article/54972-eng.htm>
- Marchildon, G. P. (2013). Canada: Health system review. *Health Systems in Transition*, 15(1), 1-179.

- Martin, R., Buxton, J., Smith, M., & Hislop, T. (2012). The scope of the problem: The health of incarcerated women in BC. *BC Medical Journal*, *54*(10), 502-508.
- Mays, N., & Pope, C. (1995). Rigour And Qualitative Research. *BMJ*, *311*(6997), 109-112.
- Mertens, D. M. (2012). What Comes First? The Paradigm or the Approach? *Journal of Mixed Methods Research*, *6*(4), 255-257. doi:10.1177/1558689812461574
- Miller, A. (2013). Prison health care inequality. *Canadian Medical Association Journal*, *185*(6), E249-E250.
- Morgan, S., & Yoder, L. H. (2011). A Concept Analysis of Person-Centered Care. *Journal of Holistic Nursing*, *30*(1), 6-15. doi:10.1177/0898010111412189
- Morrison-Beedy, D., Côté-Arsenault, D., & Feinstein, N. F. (2001). Maximizing results with focus groups: Moderator and analysis issues. *Applied Nursing Research*, *14*(1), 48-53. doi:10.1053/apnr.2001.21081
- Morse, J. M. (2015). Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry. *Qualitative Health Research*, *25*(9), 1212-1222. doi:10.1177/1049732315588501
- Novick, G. (2008). Is there a bias against telephone interviews in qualitative research? *Research in Nursing & Health*, *31*(4), 391-398. doi:10.1002/nur.20259
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, *16*(1), 1-13. doi:10.1177/1609406917733847
- O'Reilly, M., & Parker, N. (2012). 'Unsatisfactory Saturation': a critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, *13*(2), 190-197. doi:10.1177/1468794112446106

- Owen, S. (2001). The practical, methodological and ethical dilemmas of conducting focus groups with vulnerable clients. *Journal of Advanced Nursing*, 36(5), 652-658.
doi:10.1046/j.1365-2648.2001.02030.x
- Paisi, M., Kay, E., Plessas, A., Burns, L., Quinn, C., Brennan, N., & White, S. (2019). Barriers and enablers to accessing dental services for people experiencing homelessness: A systematic review. *Community Dentistry and Oral Epidemiology*, 47(2), 103-111.
doi:10.1111/cdoe.12444
- Penchansky, R., & Thomas, J. W. (1981). The Concept of Access: Definition and Relationship to Consumer Satisfaction. *Medical Care*, 19(2), 127-140.
- Ponic, P., Varcoe, C., & Smutylo, T. (2016). *Trauma- (and Violence-) Informed Approaches to Supporting Victims of Violence: Policy and Practice Considerations*. Retrieved from <https://www.justice.gc.ca/eng/rp-pr/cj-jp/victim/rd9-rr9/p2.html>
- Prins, S. J. (2014). Prevalence of Mental Illnesses in U.S. State Prisons: A Systematic Review. *Psychiatric Services*, 65(7), 862-872. doi:10.1176/appi.ps.201300166
- Public Safety Canada. (2017). *2017 Corrections and Conditional Release Statistical Overview*. Retrieved from <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/ccrso-2017/index-en.aspx>
- Raja, S., Hoersch, M., Rajagopalan, C. F., & Chang, P. (2014). Treating patients with traumatic life experiences: Providing trauma-informed care. *The Journal of the American Dental Association*, 145(3), 238-245. doi:<https://doi.org/10.14219/jada.2013.30>
- Richie, B. E. (2001). Challenges Incarcerated Women Face as They Return to Their Communities: Findings from Life History Interviews. *Crime & Delinquency*, 47(3), 368-389. doi:10.1177/0011128701047003005

- Rouxel, P., Duijster, D., Tsakos, G., & Watt, R. G. (2013). Oral health of female prisoners in HMP Holloway: implications for oral health promotion in UK prisons. *British Dental Journal*, 214(12), 627-632. doi:10.1038/sj.bdj.2013.581
- Saurman, E. (2015). Improving access: modifying Penchansky and Thomas's Theory of Access. *Journal of Health Services Research & Policy*, 21(1), 36-39. doi:10.1177/1355819615600001
- Shaw, J. L., & Farmer, J. W. (2015). *An environmental scan of publicly financed dental care in Canada: 2015 update*. Retrieved from <http://www.caphd.ca/programs-and-resources/government-dental-programs>
- Sheridan, J., Aggleton, M., & Carson, T. (2001). Dental health and access to dental treatment: a comparison of drug users and non-drug users attending community pharmacies. *British Dental Journal*, 191(8), 453-457. doi:10.1038/sj.bdj.4801206a
- Simmer-Beck, M., Gadbury-Amyot, C., Williams, K. B., Keselyak, N. T., Branson, B., & Mitchell, T. V. (2013). Measuring the short-term effects of incorporating academic service learning throughout a dental hygiene curriculum. *International Journal of Dental Hygiene*, 11(4), 260-266. doi:10.1111/idh.12015
- Teplin, L. A., Abram, K. M., & McClelland, G. M. (1996). Prevalence of Psychiatric Disorders Among Incarcerated Women: I. Pretrial Jail Detainees. *Archives of General Psychiatry*, 53(6), 505-512. doi:10.1001/archpsyc.1996.01830060047007
- Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic Analysis. In *The SAGE Handbook of Qualitative Research in Psychology* (pp. 17-36). 55 City Road, London: SAGE Publications Ltd. Retrieved from <https://methods.sagepub.com/book/the-sage->

[handbook-of-qualitative-research-in-psychology-second-edition.](#)

doi:10.4135/9781526405555

The Elizabeth Fry Society of Greater Vancouver. (2019a). Guiding Principles. Retrieved from <https://elizabethfry.com/about/guiding-principles/>

The Elizabeth Fry Society of Greater Vancouver. (2019b). Programs & Services. Retrieved from <https://elizabethfry.com/we-can-help/programs-services/>

Thomas, D. R. (2017). Feedback from research participants: are member checks useful in qualitative research? *Qualitative Research in Psychology, 14*(1), 23-41.

doi:10.1080/14780887.2016.1219435

Thomas, E., & Magilvy, J. K. (2011). Qualitative Rigor or Research Validity in Qualitative Research. *Journal for Specialists in Pediatric Nursing, 16*(2), 151-155.

doi:10.1111/j.1744-6155.2011.00283.x

Tilley, S. (2016). *Doing Respectful Research: Power, Privilege and Passion*. Black Point, NS: Fernwood Publishing.

Treadwell, H. M., Blanks, S. H., Mahaffey, C. C., & Graves, W. C. (2016). Implications for improving oral health care among female prisoners in Georgia's correctional system. *Journal of Dental Hygiene, 90*(5), 323-327.

Tudor Hart, J. (1971). The Inverse Care Law. *The Lancet, 297*(7696), 405-412.

doi:10.1016/S0140-6736(71)92410-X

Turney, K. (2017). Unmet Health Care Needs among Children Exposed to Parental Incarceration. *Maternal And Child Health Journal, 21*(5), 1194-1202.

doi:10.1007/s10995-016-2219-2

- Wallace, B. B., & Macentee, M. I. (2012). Access to Dental care for Low-Income Adults: Perceptions of Affordability, Availability and Acceptability. *Journal of Community Health, 37*(1), 32-39. doi:10.1007/s10900-011-9412-4
- Walsh, T., Tickle, M., Milsom, K., Buchanan, K., & Zoitopoulos, L. (2008). An investigation of the nature of research into dental health in prisons: a systematic review. *British Dental Journal, 204*(12), 683-689. doi:10.1038/sj.bdj.2008.525
- Wener, M. E., Schönwetter, D. J., & Mazurat, N. (2011). Developing New Dental Communication Skills Assessment Tools by Including Patients and Other Stakeholders. *Journal of Dental Education, 75*(12), 1527-1541.
- Wilson, H. S., & Hutchinson, S. A. (1991). Triangulation of Qualitative Methods: Heideggerian Hermeneutics and Grounded Theory. *Qualitative Health Research, 1*(2), 263-276. doi:10.1177/104973239100100206
- World Health Organization. (2019). Health Impact Assessment (HIA): Glossary of terms used. Retrieved from <https://www.who.int/hia/about/glos/en/index1.html>

Appendices

Appendix A : Client Satisfaction Survey



Client Satisfaction Questionnaire

Date: _____, 20____

Location: _____

How are we doing?

Please tell us how you feel about the care you received by checking the boxes below. The information you give will be kept private.

	Agree	Partly Agree	Neutral	Partly Disagree	Disagree
My student dental hygienist clearly explained the details of my overall care in a way I could understand					
My student dental hygienist clearly explained the time needed to complete my care					
My student dental hygienist was able to provide a referral for additional care that I needed					
My student dental hygienist always treated me with respect					
I feel that my personal information is kept private and confidential					
Attending this clinic improved my oral health knowledge					
The instructors were helpful and respectful to my student dental hygienist					
The student dental hygienist had the equipment and supplies required to provide my care					
I felt comfortable receiving my dental hygiene care at this location					
I am happy with the overall dental hygiene care that I received If no – why? _____ _____					
I would come back to this site again for dental hygiene care If no - why? _____ _____					

Some suggestion to improve my dental hygiene care are:

Additional comments:

Thank you very much for your feedback. It is important that we understand how we are doing and how we can improve the services that we provide.

Appendix B : Interview Guide for Focus Group with EFry Staff



Focus Group Script for EFry Staff

The Elizabeth Fry Society of Greater Vancouver
Evaluation of a dental hygiene community outreach program for women with a history of incarceration

Objectives (Will not review with group)

To provide a description of:

- The organizational aspects of the dental hygiene program at EFry that work well and those that do not work well, as perceived by the staff of EFry
- The impact on oral health and oral health knowledge and skills of the dental hygiene program at EFry, as perceived by the staff of EFry
- Whether the program has met the organization's expectations, and areas of the program that can be improved

Equipment Set-Up

- Paper, pens, and binder for note taking
- Clipboards, 2-3 sheets of paper, and pens for participants
- Recording equipment (2 digital voice recorders, extra AAA batteries)
- Food and beverages

Introduction and Ground Rules (5 Minutes)

Welcome, and thank you for taking the time to be a part of this focus group.

Good afternoon. My name is _____ and I will be leading our discussion today. With me is _____ who will be assisting me and taking notes. This discussion will take approximately one hour. Feel free to grab some food or go to the washroom at any point throughout the session.

A. Purpose

Today we are going to discuss how you think the dental hygiene program at EFry has impacted your organization, the staff, and clients. We are primarily interested in learning whether the dental hygiene program is appropriate for your organization and clients, and how you think the program has impacted your organization.

B. Background

I would like to give you some background information about why we began the dental hygiene clinic at EFry and why we are now evaluating it. As you may or may not know, oral health can have an impact on your overall health. Unfortunately, many groups of people in Canada have difficulty accessing oral health care services for a number of reasons. A few years ago, EFry staff noticed that oral health services were not widely available for their clients, and so the development of the current dental



hygiene program at EFry began in collaboration with EFry, their clients, and UBC Dentistry. The dental hygiene clinic at EFry will soon be expanded to offer additional on-site dental services, which will be provided by both UBC dental hygiene students and UBC dental students and residents at the new building in Surrey. We are currently evaluating the dental hygiene program at EFry because we would like to understand what is working and what isn't working well, and how to improve the program so we can provide the best dental care possible for the clients of EFry.

The information and insight that you share today will be invaluable for helping to plan and implement the new program. I would like you to be as honest as possible with your input, and share any information you feel comfortable sharing that you think would be of value to us. If there are any questions that you do not feel comfortable answering, that is fine and you do not need to answer them. I would like this discussion to be as open and comfortable as possible.

C. Confidentiality

Your confidentiality will be respected by the investigators and your identity will not be disclosed. We may use some of your comments in written reports of this discussion, but we will never list your name anywhere. I request that all of the discussions that take place here today remain confidential, and that you do not share other participant's private information with anyone outside this group. However, we must inform you that that cannot be insured by us, and we cannot control whether other group members disclose such information.

D. Note taking and Recording

I will be taking notes and recording the discussion using digital voice recorders so I will have a true account of what was said, and so no comments are missed. The audio recording will be transcribed. Your comments will be anonymous in the transcribed version, and the audio version will be destroyed.

E. Ground Rules

1. *There are no right or wrong answers.*
2. *We expect and respect different points of view.*
3. *If you are uncomfortable with a question, feel free to pass.*
4. *We have quite a few things to talk about. I apologize in advance that sometimes I may need to stop the discussion in order to move on.*
5. *Please speak one at a time so that everyone can be heard.*
6. *We want to learn from you today, so we will be happy to answer any other questions you may have at the conclusion of our discussion.*

I will try to make sure that everyone has a turn speaking. This discussion is to exchange opinions about perceptions of the impact and acceptability of the dental hygiene program at EFry, and I greatly value your input and thoughts.

**I. Introductions (2 minutes)**

I'd like to do a round of introductions to start off the session, mainly so I have a chance to learn everyone's names. I'd like to go around the circle and just have everyone say your name, your position or role at EFry, and how long you've been working here. So, I'll start the round of introductions.

Questions**II. Impact on EFry: Acceptability (30 minutes)**

I would like to start with a brief discussion about how the dental hygiene program has impacted the work that you do.

1. Think back to when you first heard about the dental hygiene clinic at EFry. What did you think about the clinic?
2. What were your initial expectations for the dental hygiene clinic?
3. How has having the dental hygiene clinic located in the EFry building impacted the work that you do?
4. What value do you think the dental hygiene program brings to your organization?

III. Impact on Clients: Availability & Accessibility (10 minutes)

I would now like to discuss how you think the dental hygiene program has impacted your clients.

5. How do you think that having a dental hygiene clinic in the EFry building has impacted accessibility to dental care for your clients?
6. Do you think the dental hygiene clinic has provided your clients with the care and services they need?

IV. Awareness & Miscellaneous (20 minutes)

7. Can you tell me what you know about the dental hygiene program?
8. Are there any aspects of the dental hygiene program that you think could be improved?
9. Is there anything that we didn't discuss that you think is important or would be helpful for us to help understand the impact of the dental hygiene program at EFry, and how we can improve it?



V. Summation

Do brief summary and thank you.

In the last few minutes, we would like you to write any “after thoughts” about the discussion today. These can include any comments or reflections on the discussion, or things that you didn’t get an opportunity to share today or didn’t feel comfortable discussing with the group. Please take a minute to write these down on a piece of paper.

Before you leave today we would appreciate if you could also complete a quick survey about yourself and how the dental hygiene program at EFry has impacted the work that you do.

Thank you!

Appendix C : Interview Guide for Focus Groups with Clients



Focus Group Script for EFry Clients

The Elizabeth Fry Society of Greater Vancouver
Evaluation of a dental hygiene community outreach program for women with a history of incarceration

Objectives (Will not review with group)

To provide a description of:

- The organizational aspects of the dental hygiene program at EFry that work well and those that do not work well, as perceived by the clients of the program
- The impact on oral health of the dental hygiene program at EFry as perceived by the clients of the program
- The impact on oral health knowledge and skills of the dental hygiene program at EFry as perceived by the clients of the program

Equipment Set-Up

- Paper, pens, and binder for note taking
- Name tags and coloured markers
- Clipboards, 2-3 sheets of paper, and pens for participants
- Recording equipment (2 digital voice recorders, extra AAA batteries)
- Food and beverages

Introduction and Ground Rules (5 Minutes)

Welcome, and thank you for taking the time to be a part of this focus group.

My name is _____ and I will be leading our discussion today. With me is _____ who will be assisting me and taking some notes throughout the session. This focus group will take approximately an hour, followed by a brief survey. Feel free to grab some food or go to the washroom at any point throughout the session.

1. Purpose

Today we are going to discuss the dental hygiene program at EFry. We are primarily interested in learning about your experiences receiving dental hygiene care at this clinic, and we would like to know whether the program was able to meet your expectations. We would also like to know how the program has met your oral health needs, or how it has failed to meet your needs. We are also interested in discussing if you have learned anything about your oral health by receiving care at the clinic at EFry. Finally, we are interested in understanding how we can improve the dental hygiene program at EFry.

2. Background

I would like to give you some background information about why we began the dental hygiene clinic at EFry, and why we are now evaluating it. As you may or may not know, oral health can have an impact on your overall health. Unfortunately, many



groups of people in Canada have difficulty accessing oral health care services for a number of reasons. The Elizabeth Fry Society of Greater Vancouver provides various services and programs for women, girls, and their families impacted by the criminal justice system in the Greater Vancouver region of British Columbia. A few years ago, EFry noticed that oral health services were not widely available for their clients, and so in collaboration with EFry, their clients, and UBC Dentistry, the dental hygiene program was created. The dental hygiene clinic at EFry will soon be expanded to offer additional on-site dental services, which will be provided by both UBC dental hygiene students and UBC dental students and residents. We are currently evaluating the dental hygiene program at EFry because we would like to understand how to improve the program so we can provide the best dental care possible for the clients of EFry.

The information and insight that you share today will be invaluable for helping to plan and implement the new program. I would like you to be as honest as possible with your input, and share any information you feel comfortable sharing that you think would be valuable to us. If there are any questions that you do not feel comfortable answering, that is fine and you do not need to answer them. I would like this discussion to be as open and comfortable as possible.

3. Confidentiality

Your confidentiality will be respected by the investigators and your identity will not be disclosed. We may use some of your comments in written reports of this discussion, but we will never list your name anywhere. I also request that all of the discussions today remain confidential, and that you do not share other participant's private information with anyone outside this group. However, that cannot be insured by us because we cannot control whether other group members disclose such information.

4. Note taking and Recording

We will be taking notes and recording the discussion using digital voice recorders so we can have a true account of what was said, and so that no comments are missed. The audio recording will be transcribed. Your comments will be anonymous in the transcribed version, and the audio version will be destroyed.

5. Ground Rules

1. *There are no right or wrong answers.*
2. *We expect and respect different points of view.*
3. *If you are uncomfortable with a question, feel free to pass.*
4. *We have quite a few things to talk about. I apologize in advance that sometimes I may need to stop the discussion in order to move on.*
5. *Please speak one at a time so that everyone can be heard.*
6. *We want to learn from you today, so we will be happy to answer any other questions you may have at the end of our discussion.*
7. *Would anyone like to suggest an additional ground rule?*

I will try to make sure that everyone has a turn speaking. This discussion is to exchange opinions about your experiences receiving dental hygiene care at EFry, and we greatly value your input and thoughts.

**I. Ice Breaker (5 minutes)**

I'd like to do an activity to start off the session so we can all have a chance to introduce ourselves. There are some blank name tags and coloured markers on the table. If you could each choose a colour that has some sort of meaning to you, and write your name on a name tag using that colour. It doesn't have to be a significant meaning – it could be that you just like that colour, or you may have a story associated with that colour. Once everyone has finished, we will go around and each introduce ourselves and mention briefly why we chose the colour we did. I will start the round of introductions once we are all ready.

Questions**II. Awareness, Affordability & Accessibility (15 minutes)**

I would first like to start with a brief discussion about how you heard about the dental hygiene clinic at EFry, and what you initially thought about the clinic.

1. Think back to when you first heard about the dental hygiene clinic at EFry. What did you think about the clinic?
2. What are some reasons why you decided to come to the dental hygiene clinic here, as opposed to going to a different dental clinic?
3. Describe what you think about the fact that the dental hygiene clinic is located at EFry.

III. Accommodation (15 minutes)

We would now like to talk about how the dental hygiene clinic is organized.

4. I'd like you to think a bit about how the dental hygiene clinic looks. Can you describe any physical aspects of the clinic that you like or don't like?
5. Tell me what it is like to make an appointment at the EFry dental hygiene clinic.
6. How do you feel about the length of the appointments?

IV. Availability (10 minutes)

Now I would like to briefly talk about the types of services that you have received at the dental hygiene clinic.

7. Were you able to get the oral health care that you needed at the dental hygiene clinic?



8. Since the dental hygiene clinic cannot provide certain dental services, sometimes your student dental hygienist will provide you will a referral get more dental care at a different clinic. If one of the student dental hygienists gave you a referral, would you be likely to go to it? You may also share your own experience with receiving a referral here, if you feel comfortable.

V. Acceptability (10 minutes)

Now I would like to briefly talk about your experiences receiving dental hygiene care.

9. Are there any specific things you can remember that your student dental hygienist, or the clinical instructor, did that made you feel comfortable?
10. Are there any specific things you can remember that your student dental hygienist, or the clinical instructor, did that made you feel uncomfortable?

VI. Miscellaneous (10 minutes)

We would now like to spend a few minutes talking about how the dental hygiene clinic at EFry has impacted you.

11. Can you describe what you have learned about your oral health since receiving dental hygiene care at the EFry clinic?
12. How has receiving dental hygiene care here impacted your life?
13. Is there anything that we didn't discuss that you think is important or would be helpful for us to help understand how we can improve the dental hygiene program?

VII. Summation

(I will do a brief summary of the focus group discussion, and ask whether the summary is sufficient)

In the last few minutes, we would like you to write any "after thoughts" about the discussion today. These can include any comments or reflections on the discussion, or things that you didn't get an opportunity to share today or didn't feel comfortable discussing with the group. Please take a minute to write these down on a piece of paper.

Before you leave today we would appreciate if you could also complete a quick survey about yourself and your experiences with the dental hygiene clinic at EFry. Thank you!

Research study



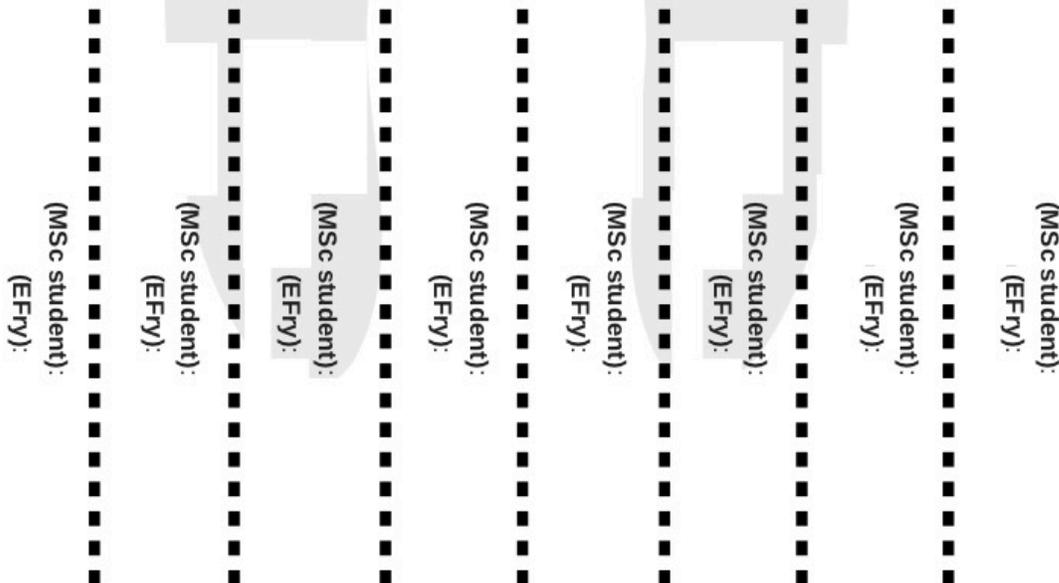
UBC Dental Hygiene Clinic: What was your experience like?

WHO: anyone who has received dental hygiene care at the UBC dental hygiene clinic at EFry

WHY: we want listen to your experiences with receiving dental hygiene care, and understand what you like and don't like about the dental hygiene clinic

WHAT: you will be part of a focus group with 7 other people who have received dental hygiene care at the clinic
- you will receive a \$25 President's Choice gift card for your time

WHEN: Friday, March 16th at EFry
- 12:00 - 12:15 PM for refreshments
- 12:15 - 1:15 PM for the focus group discussion



Appendix E : Recruitment Email to EFry Staff

Hi,

My name is _____, and I am currently a Masters student in the Faculty of Dentistry at UBC. I am conducting an evaluation of the UBC dental hygiene program at EFry. As part of this research project, I would like to understand how the dental hygiene program has impacted you as staff members of EFry, and hear about your overall experience, if any, with the program. I am particularly interested in your diverse views about the program and how you think the program has impacted your clients, as you all fill different roles as staff at EFry.

I am emailing you to ask if you would like to be part of a focus group with other EFry staff, which will be held during business hours at EFry. This focus group will last about 1 hour, and refreshments will be served.

The potential dates for the focus group are:

Wednesday, March 7 @ 10 AM

Thursday, March 8 @ 10 AM

If you would like to participate, please let me know as soon as possible by email and indicate which date(s) would work for you. This is so we can schedule a day and time which will work for everyone.

I look forward to hearing back from you.

Best,

Appendix F : Research Consent Form



UBC DENTISTRY



DEPARTMENT OF ORAL BIOLOGICAL AND MEDICAL SCIENCES

Research Study Information and Consent Form Evaluation of the Dental Hygiene Program at the Elizabeth Fry Society of Greater Vancouver

Who is conducting the study?

Principal Investigator:

Co-Investigator:

Why should you take part in this study?

You are being invited to take part in this research study because you are/have been a client of the dental hygiene program at the Elizabeth Fry Society of Greater Vancouver (EFry), or you are a staff member at EFry. The information that you can provide us with about your experiences with the dental hygiene program are valuable to us, and will help us understand how to improve the program to best meet your needs.

Your participation is entirely voluntary, so it is up to you to decide whether or not to take part in this study. It is important for you to understand what the research involves, and this consent form will tell you about the research study, why the study is being done, what you will take part in during the study, and the possible benefits and risks of participating.

If you wish to participate, you will be asked to sign this form. If you do decide to take part in this study, you can still withdraw at any time, and without giving any reasons for your decision.

What is the purpose of this study?

Women from various populations face unique barriers to accessing health care services, including oral health services. EFry supports women from diverse populations in the Greater Vancouver region. In partnership with the Dental Hygiene Degree Program at The University of British Columbia (UBC), a dental hygiene program was started at EFry and dental hygiene students have been providing free on-site dental hygiene care and referrals to EFry clients for the past three years. Currently, little is known about the experiences that EFry clients and staff have had with this program, and how this program has impacted the clients and staff of EFry. This information would help improve the program so it meets the needs of the clients and staff of EFry.

Version 2
Evaluation of the Dental Hygiene Program at the Elizabeth Fry Society of Greater Vancouver
March 5, 2018

Page 1 of 3

What will you do if you participate in this study?

You will participate in a private and confidential focus group with approximately 6-10 participants that will last about one hour with the investigators. The focus group discussion will be audio-recorded. At the end of the focus group, clients of the UBC dental hygiene clinic will complete a brief questionnaire that will take about 5 minutes.

What are the potential risks and benefits of this study?

We do not think that this study will be harmful or bad for you. We may ask a question that makes you feel uncomfortable. Please let one of the study staff know if you have any concerns. Your participation will help us understand your experiences with the dental hygiene program, how the program has impacted you, as a client or staff member of EFry, and how we can improve the program to best meet your needs.

How will your identity be protected?

Your confidentiality will be respected. Identifying information will be assigned a code number, and any personal information will be removed to keep your identity confidential. The list of names and matching code numbers will be stored separately from all other study information. All documents will be kept in a locked filing cabinet in the Faculty of Dentistry at the University of British Columbia. Computer data records will be password protected. You will not be identified by name in any reports of the completed research study. Your identity will be kept confidential by the investigators; however, this study involves a group discussion and therefore your identity will be known to others who are participating. We will encourage participants not to discuss the content of the focus group to people outside the group; however, we cannot control what participants do with the information discussed.

Will you be paid for participating in this study?

As a client of the UBC dental hygiene program, you will be given a \$25 gift card for your time for participating in this study. Clients and staff of EFry will be provided with light refreshments during the focus group.

Who can you contact for more information about the study?

If you have any questions or concerns about what we are asking of you, please contact the Principal Investigator or Co-Investigator. The names and telephone numbers are listed at the top of the first page of this form.

Who can you contact if you have complaints or concerns about the study?

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, please contact the Research Participant Complaint Line in the UBC Office of Research Ethics at

Appendix G : Post-Interview Survey



UBC DENTISTRY



DEPARTMENT OF ORAL BIOLOGICAL AND MEDICAL SCIENCES

General Survey

1. Age: _____ years
2. Ethnicity: _____
3. Years in Canada: _____
4. Educational background:
 - () Less than elementary school / no school
 - () Elementary school (grades 1-7)
 - () High school (grades 8-12)
 - () University
 - () Post-university
5. How many times did you go to the EFry dental hygiene clinic?
 - () Once
 - () Twice
 - () Other _____
6. What types of care did you receive at the dental hygiene clinic at EFry?
Check all that apply.
 - () Oral assessment / examination
 - () Oral hygiene education / instructions about how to brush and floss
 - () Teeth cleaning
 - () Fluoride varnish
 - () Sealants/Temporary restorations
 - () Other _____
7. How many times did you cancel an appointment at the EFry dental hygiene clinic?
 - () Never
 - () Once
 - () Twice
 - () Other _____
8. Why did you cancel an appointment at the EFry dental hygiene clinic?
 - () I never cancelled an appointment
 - () I was sick
 - () I had a time conflict with something else
 - () Other _____



9. How many times did you miss an appointment at the EFry dental hygiene clinic without cancelling it beforehand?

- Never
- Once
- Twice
- Other _____

10. Why did you miss your appointment?

- I never missed an appointment without cancelling it beforehand
- I was sick
- Something came up / I had a time conflict
- I had problems getting to the clinic that day
- I forgot about the appointment
- Other _____

11. If you received a referral to a different clinic for more dental care (that could not be provided at the EFry dental hygiene clinic), what did you receive a referral for?

- I did not receive a referral
- Cavity
- Broken tooth
- Dentures
- Tooth / jaw pain
- Tooth extraction
- Other _____

12. Did you go to this referral?

- I did not receive a referral
- Yes, I went to the referral
- No, I did not go to the referral

13. If you didn't go to the referral, why did you not go? **Check all that apply.**

- I did not receive a referral / I went to the referral
- The referral was too far away / it was difficult to get there
- Fear or anxiety about having the dental procedure done
- Fear or anxiety about going to a new dental clinic / dentist
- Too expensive
- Other _____