

Research to action: The Sea to Sky Sexual Health Survey

By Tamara Dudley

The essence of change begins with individuals and groups who will no longer tolerate the status quo.

Tamara Dudley's article documents her research data on sexual violence along the Sea to Sky Highway, which extends from Vancouver, BC, to just north of Whistler, BC. The article demonstrates that access to timely care in regards to sexual violence is not equal in all parts of Canada. Urban centres are more likely able to provide the medical and/or forensic care depending on the patient's wishes than non-urban or rural communities. Tamara describes how one community (Squamish, BC) decided to gain access to the care needed by those who have been sexually assaulted in their community. It has taken many dedicated individuals and groups to accomplish a health-care response to sexual violence, so that care can be provided within the health framework of the community itself.

This process brings to mind Margaret Mead's quote: "Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has."

—Introduction by Sheila Early

Introduction

Sexualized violence is a pressing concern to stakeholders and residents of the Sea to Sky Corridor, an area located on the West Coast of Canada. Between 2000 and 2009, the Sea to Sky Corridor had almost three times more sexual offences per capita (95.65 per 100,000 population), than urban centres such as Richmond or North Vancouver (34.56 and 37.81 sexual offences per 100,000 population, respectively) (Ministry of Public Safety and Solicitor General Police Services Division, 2011; British Columbia Statistics, n.d.). Furthermore, domestic violence spiked by 46% throughout the Sea to Sky Corridor in 2013, and jumped by 87% in the community of Squamish alone (Enders, 2014). As of Fall 2013, no forensic nursing services existed in the Sea to Sky Corridor; residents who experienced sexual assault had to travel to Vancouver, up to three hours away by car, in order to access forensic nurse examination (Cooley-Herdman, Sherkat, & Bulloch, 2012). Furthermore, no independent research had been conducted exploring rates of reported and unreported sexualized violence in the Sea to Sky Corridor. As a response to this lack of research, the Sea to Sky Sexual Health Survey was created to establish baseline data for better insights into the service and programming needs of the corridor with regards to sexual health and sexualized violence.

Methods

Using a cross-sectional survey design, this study had three areas of focus: sexual health, service use, and sexual assault. Participants were recruited by word of mouth, online distribution of the survey via social media and partner websites, and posters distributed throughout Squamish and Whistler. Participation was not randomized. All genders, sexes, and sexual orientations were invited to participate. In total, 251 individuals participated in the survey; 205 were eligible for inclusion. Data collection occurred over a period of three months, and were collected through an anonymous and confidential online survey. Participants were excluded from the analysis if under the age of 19, if they did not provide their informed consent, if they were not residents of the Sea to Sky Corridor, or if they did not answer key questions. Furthermore, due to a lack of participation from individuals who identify outside the gender binary (i.e., do not identify as a woman or as a man), this population was excluded from the analysis to avoid bias. The survey drew from the Canadian Criminal Code (Statistics Canada, 2008) and from the literature (McMahon, 2011; Coxell & King, 2010; Harrell et al., 2009; Rape, Abuse & Incest National Network, 2009; Busch-Armendariz, DiNitto, Bell, & Bohman, 2010) to define sexual assault as unwanted sexual contact, including, but not limited to unwanted touching, kissing, or penetration.

Univariate¹ analysis of counts and frequencies was conducted for demographic variables and variable experiences of sexual assault. Bivariate analysis was conducted analyzing the association between demographic characteristics and being a survivor of sexual assault. Unadjusted odds ratios and confidence intervals, and *p*-values are provided in Tables 1 and 2. Additional bivariate analysis was conducted exploring the association between demographic characteristics with experiencing multiple sexual assaults, in addition to the association between number of assaults experienced and reporting rates for forensic evidence collection and police involvement.

Results

Sample Characteristics

A total of 205 participants were included in the final analysis. Approximately three-quarters identified as women (73%), while 27% identified as men. The majority of participants were between ages of 19 and 25 (53%); 12% identified as being a visible minority. In the sample, 23% of participants identified as being survivors of sexual assault; of those participants, 52% had experienced multiple sexual assaults.

¹Univariate: statistical analysis of one variable (e.g., calculating the percent of participants who identified as women).

²Bivariate: analysis of two variables—specifically the explanatory (e.g., age) and outcome (e.g., having experienced sexual assault) variables.

Bivariate Analysis

Table 1 describes the bivariate² relationships between the sample characteristics and having experienced sexual assault. Identifying as a woman was statistically significantly associated with having experienced a sexual assault [OR 3.18 (1.27, 7.97)]; no other demographic variables were significantly associated with experiencing a sexual assault.

Characteristics of Assault

Only 9% of assaults had occurred in the past 12 months for multiple assault survivors, while 23% of assaults for single assault

survivors had occurred in the past 12 months (15% overall). The majority of both single and multiple assault survivors in the sample lived in Squamish (91%, 88%). Nine percent of assailants were unknown to single assault survivors, while 17% of assailants were unknown to multiple assault survivors (38% had experienced assaults with both known and unknown assailants).

There was no difference between single assault survivors and multiple assault survivors whether the only or most recent assault had occurred recently (within the past year) or more than one year ago [OR 0.31 (0.05, 1.79)]. Furthermore, there

Sample characteristics	Overall % (n)	Experienced Sexual Assault		Bivariate crude odds ratios (95% Confidence Intervals)	p-value
		Yes % (n)	No % (n)		
Age					
≥26	47.3 (97)	9.3 (19)	38.0 (78)	0.66 (0.34, 1.28]	0.22
19–25	52.7 (108)	14.1 (29)	38.5 (79)		
Gender					
Women	73.2 (150)	20.5 (42)	52.7 (108)	3.18 (1.27, 7.97)	0.01
Men	26.8 (55)	2.9 (6)	23.9 (49)		
Ethnicity					
Visible Minority	11.7 (24)	3.4 (7)	8.3 (17)	1.41 (0.55, 3.62)	0.48
White	88.3 (181)	20.0 (41)	68.3 (140)		
Schooling					
Post-secondary or higher	90.7 (186)	21.5 (44)	69.3 (142)	1.16 (0.37, 3.68)	0.80
Up to high school	9.3 (19)	2.0 (4)	7.3 (15)		
Location of Residence					
Squamish	90.2 (185)	21.0 (43)	69.3 (142)	0.91 (0.31, 2.64)	0.86
Other	9.8 (20)	2.4 (5)	7.3 (15)		
Number of Assaults					
Of the survivors, 52% had experienced multiple assaults. However, bivariate analysis showed that no demographic factors were associated with having experienced multiple assaults, although age approached significant [OR 3.07 (0.91, 10.37). p=0.07]. Table 2 describes the bivariate relationships between the assault characteristics and having experienced more than one sexual assault.					

Sample characteristics	Overall % (n)	Experienced Multiple Sexual Assaults		Bivariate crude odds ratios (95% Confidence Intervals)	p-value
		Yes % (n)	No % (n)		
Age					
≥26	60.4 (19)	27.1 (13)	12.5 (6)	3.07 (0.91, 10.37)	0.07
19–25	39.6 (29)	25.0 (12)	35.4 (17)		
Gender					
Women	88.0 (44)	45.8 (22)	41.7 (20)	1.10 (0.20, 6.09)	0.91
Men	12.0 (6)	6.3 (3)	6.3 (3)		
Ethnicity					
Visible Minority	14.6 (7)	6.3 (3)	8.3 (4)	0.65 (0.08, 4.41)	0.70
White	85.4 (41)	45.8 (22)	39.6 (19)		
Schooling					
Post-secondary or higher	91.7 (44)	50.0 (24)	41.7 (20)	3.51 (0.26, 196.5)	N/A
Up to high school	8.3 (4)	2.1 (1)	6.3 (3)		

was no association between whether the assault(s) occurred on a weekday or weekend [OR 1.71 (0.50, 5.92)] or whether the assault(s) occurred during the day or at night [OR 1.06 (0.20, 5.51)] and number of assaults experienced.

Reporting Assault

Only one out of 46 survivors in the sample had forensic evidence collected. Furthermore, only 9% of survivors reported their assault(s) to the police. The top reasons reported by survivors for not seeking forensic evidence collection were: “I didn’t want to tell anyone,” (19%), “I was worried that people would blame me,” (15%), and “I didn’t realize that I had been assaulted,” (15%) (see Figure 1), while top reasons identified for not reporting to the police were: “I didn’t want to tell anyone,” (20%), and “I didn’t think it would help,” (19%) (see Figure 2). Number of assaults experienced was not significantly associated with reporting the assault(s) to the police [OR 3.08 (0.22, 173.74)]. The odds ratio for collection of forensic evidence could not be collected due to zero cell counts.

Discussion

This study provides quantitative evidence that residents of the Sea to Sky Corridor have experienced sexual assault. As the first research of its kind, these results provide baseline information to build further research into sexual assault in the corridor. These results suggest that one in four people in the corridor have experienced sexual assault (39% of women and 12% of men), and of these individuals, roughly half had experienced more than one assault. Many demographic factors that are often associated with experiencing sexual assault, such as identifying as a visible minority (Boykins, Alvanzo, Carson, Forte, Leisey, & Pilchta, 2010), were not associated with experiencing sexual assault in this analysis. However, over-representation of certain demographics likely biased these results.

Approximately one-eighth of assaults had occurred within the past 12 months, suggesting that sexualized violence is an ongoing problem in the area. However, only two percent of survivors reported having forensic evidence collected post-assault, and less than 10% identified having reported their assault(s) to the police. These numbers imply that survivors of assault are not accessing services post-assault that can help connect them with medical help and support systems, and which are often vital to prospective criminal investigations. Concerns over blame, an unwillingness to report, and concerns over whether reporting

would benefit the survivor mainly prohibited seeking forensic evidence collection and police involvement. These outcomes suggest that survivors do not feel that the benefits of these services outweigh the potential negative outcomes from reporting or seeking medical attention.

Research to action

Knowledge translation occurred throughout several phases of this research in partnership with community groups and the local health authority. In summer 2015, the Howe Sound Women’s Centre (HSWC), a long-time advocate for sexual assault survivors in the corridor, secured funding to hire a Sexual Assault Response & Prevention Coordinator. Concurrently, a nurse practitioner from Vancouver Coastal Health, the local health authority, reviewed the findings from the Sea to Sky Sexual Health Survey in response to calls for funding for forensic nursing staff at the Squamish General Hospital. At a meeting hosted by the HSWC in Fall 2015, the full results of the Sea to Sky Sexual Health Survey, including all age groups, were presented to stakeholders. Sheila Early, a forensic nursing professor from the British Columbia Institute of Technology, also presented on building an effective forensic nursing program with community engagement. At this meeting, it was announced that the Sea to Sky Corridor’s first forensic nurse had been trained, and would be offering forensic nursing services at the Squamish General Hospital.

One year post-implementation of the program, in an interview with the HSWC, Kristine Good, the Program Supervisor of Public Health and Prevention for Squamish, Whistler, and Pemberton described the benefits seen from the corridor’s forensic nursing program, and its impact in “reduc[ing] local barriers for victims... [as] a key component of recovery” (Howe Sound Women’s Centre Society, 2017). The program, in collaboration with continued efforts by HSWC, also generates awareness of the services in the community. The HSWC also aims to continue to provide support for survivors by providing competency training for professionals and stakeholders in the community. In addition to these sessions, they are currently working to secure further funding to continue these efforts.

Limitations

There were several notable limitations to this research. The survey population was not representative of the ethnic distribution of the Sea to Sky Corridor. Future research in this region aiming

Figure 1 - Reasons for Not Seeking Forensic Evidence Collection

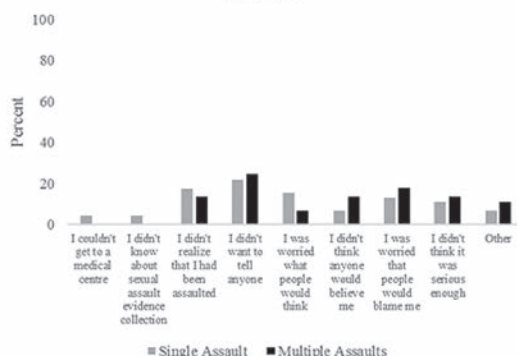
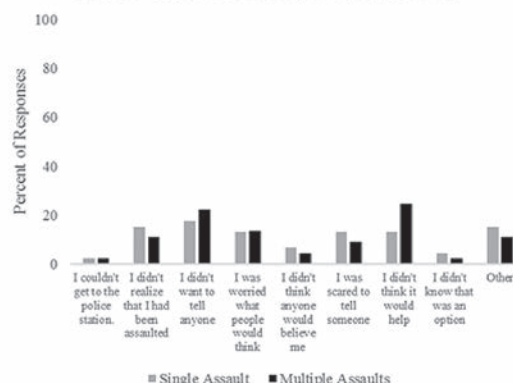



Figure 2- Reasons for Not Reporting to the Police



to include a more representative sample should make special considerations for engagement. Additionally, the research was not able to include individuals who identify outside the gender binary (i.e., as neither a woman or a man) due to a lack of responses from this population. Further research specific to this population is recommended. Although the research attempted to be representative of the entire Sea to Sky Corridor, there was a lack of participation from individuals living outside of Squamish and Whistler, the two largest communities in the corridor. Therefore, this research cannot be generalized for the entire area, although it can help inform future research specific to the communities in the corridor. Finally, as research on sexualized violence and/or sexual assault is not standardized (Sexual Violence Research Initiative, 2006), varying use of terms and definitions, in addition to diverse experience of sexualized violence by sub-populations, reduce the generalizability of such research. The definition of sexual assault used includes all levels of assault, as defined by Statistics Canada, which may differ from other definitions of sexual assault used in research.

Conclusion

The Sea to Sky Sexual Health Survey represents an effective collaboration between researchers and community stakeholders to translate research to action. Armed with independent local data, the determined efforts of stakeholders resulted in the implementation of forensic nursing services in the Sea to Sky Corridor. The advances made in the corridor's response to sexualized violence over the past two years show great potential in improving the

response to survivors, and hopefully in reducing the incidence of sexualized violence in the corridor. It is the researchers' hope that such efforts can be replicated in other communities to strengthen community-based responses to sexualized violence and, ultimately, to decrease the incidence of such violence in Canada. 

Acknowledgements

Several key stakeholders have worked tirelessly for years to improve the services available for sexual violence survivors in the Sea to Sky Corridor, most notably the Howe Sound Women's Centre Society. The supervising researcher for the Sea to Sky Sexual Health Survey, Dr. Megan Bulloch, Quest University Canada, is a former board member for the HSWC, and continues to act as a researcher and advocate for this issue in the corridor. Her work with the HSWC and her knowledge of sexual assault in the Sea to Sky Corridor inspired this project.

About the author

Tamara Dudley is a graduate student with the School of Population and Public Health at the University of British Columbia. She is working with the Gender and Sexual Health Initiative at the BC Centre for Excellence in HIV/AIDS for her thesis work exploring the how determinants of health are shaped by place for women living with HIV/AIDS. Her undergraduate thesis, *Challenging Perceptions of Sexual Victimization and Consent: Investigating Sexual Assault and Service Use in the Sea to Sky Corridor*, formed the basis for this article.

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