Research on a Vulnerable Neighborhood— The Vancouver Downtown Eastside from 2001 to 2011

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ABSTRACT *The Downtown Eastside (DTES) of Vancouver is the subject of considerable research due to high rates of drug use, poverty, crime, infectious disease, and mental illness. This paper first presents a brief background to the DTES and then presents a survey of literature addressing the issues in this area from 2001 to 2011. The literature surveyed includes a range of publications such as those from peer-reviewed journals and the grey literature of reports and dissertations. This survey investigates the themes and outcomes of the extant literature and highlights the notable lack of research on mental health in the DTES.*

KEYWORDS *DTES, Vancouver, Publications, Literature, Homelessness, Mental health, Substance use*

INTRODUCTION

The Downtown Eastside (DTES)—an impoverished area in Vancouver, British Columbia with high incidences of mental illness, substance use, communicable diseases, and crime—is the subject of considerable research. Although much of this literature exists in peer-reviewed journals, a considerable body of reports, dissertations, and white papers is found in what is termed the “grey literature.” In order to better understand the existing DTES literature, and in particular, to focus on how mental health issues have been examined and addressed, this paper presents a review of the recent academic and grey literature on this subject. To familiarize the reader with the issues included herein, we first present some historical and demographic background information on the area.

The DTES is the oldest neighborhood in Vancouver and has been given the unfortunate designation of the “poorest postal code” in Canada. This small geographic area of about 18,000 people has been home to some of the most marginalized and transient populations in the country since the 1900s¹ due in part

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to a large stock of low-income rental single-room occupancy (SRO) hotel rooms. SRO rooms are little more than sleeping rooms with shared washroom facilities that can be rented on a daily to monthly basis, initially created for the transient workforce in the local resource industries. Many of the SRO buildings are over a hundred years old and in poor repair.

During the 1960s, growing levels of substance use were observed among area residents alongside growing poverty and vulnerability.¹ The issues of poverty and addiction in the DTES gained international attention when the City of Vancouver hosted the 1986 World Expedition in which many long-term residents were forcibly evicted by some SRO hotel owners to permit their properties to be renovated into tourist hotels. These renovations resulted in a loss of over 400 low-income housing units¹ that further depressed the neighborhood. Moreover, injectable cocaine was introduced into the area, precipitating a rise in HIV rates in the DTES to epidemic levels.¹ In 1992 the rates of HIV peaked, prompting the subsequent opening of the BC Centre for Excellence in HIV/AIDS (BCCFE).

From these historic roots, the following statistics illustrate the extent of the public health issues that exist in the neighborhood. The DTES remains an area with a significant low-income (67 %) and unemployed (22 %) population, where at least 40 % of residents rely on government transfer payments² (these payment rates were frozen in 2001 by the British Columbia government). As such, these low-cost SRO rooms have become the only housing option for many low-income individuals, which, when coupled with the rising numbers of low-income individuals living in the DTES, has created a cycle of increasing disrepair. Unfortunately, the poor state of the buildings means that the only demand for these rooms is from low-income individuals who can only pay low rents, which does not provide the capital required by owners to keep these buildings in good repair. Moreover, this lack of income in the DTES makes it difficult to secure stable housing² and was a major contributor to the rates of homelessness recorded in the city.³ Furthermore, the DTES is plagued by crime, accounting for 19 % of “crimes against persons” and 36 % of drug arrests in the city in 2002.² Substance abuse problems in the DTES have been trending upwards as demonstrated by a 10-year longitudinal study (1996–2005) of 1,603 injecting drug users that found an increased use of crack cocaine in the neighborhood.⁴ At baseline, 7.4 % reported ever using crack cocaine, however, by the end of the study this rate had increased to 42.0 %.

The neighborhood also has high rates of HIV/AIDS, hepatitis C virus (HCV), and illicit substance use among precariously housed, mentally ill, and homeless individuals.⁵ With an HCV rate of 70 % and an HIV rate of 30 %, these statistics match the prevalence of HIV in Botswana.⁶ This is the result of high rates of intravenous drug use in the DTES that lead to HIV risk behaviors such as needle sharing. Additionally, injection drug users are often found to be a burden on the health care system with high rates of emergency room visits and primary care use. In a cohort study of 883 intravenous drug users (IDU), 78 % accessed a primary care clinic and 60 % accessed the emergency room within the period of a year, mostly for injection-related complications.⁷ Furthermore, prostitution adds to the problem of communicable diseases in the DTES as many women engage in unprotected survival sex work, leading to an increased vulnerability to HIV infection.⁸

As a result of these visible problems, the majority of research and policy has focused on substance abuse and public order challenges of the neighborhood as embodied by the City of Vancouver’s adoption of the “Four Pillars Drug Strategy” in the DTES in 2001.⁹ The four pillars are (a) prevention, (b) treatment, (c) harm

reduction, and (d) enforcement, and were designed to reduce drug-related harm. In particular, harm-reduction approaches were emphasized, which helped lead to the establishment of North America's first supervised injection facility (SIF), called "Insite,"¹⁰ in 2003. The opening of this facility stimulated a number of evaluation projects, which documented the effectiveness of the SIF at reducing overdose deaths, rates of HIV infection, and other communicable disease due to needle sharing. In contrast, research and subsequent policy development on mental health issues have been neglected by researchers, despite a growing awareness of the importance of mental disorders as concurrent with substance use disorders, as well as a public health issue in itself. For example, the prevalence of mental illnesses, such as anxiety disorders, was found to be extremely high in substance users in the area.^{11,12} However, existing reports have had little impact. The importance of mental health and specifically the lack of mental health treatment capacity within the health care system have received attention mainly because this issue was highlighted in recent reports to be significant drains on police services. Two landmark reports in 2008 and 2011 by the Vancouver Police Department (VPD) showed that almost half (49 %) of emergency calls in the DTES and surrounding areas were related to incidents of a mental health nature.^{11,13} Indeed, across the entire City of Vancouver, the VPD identified that over one third of all calls for service were attributable to mental health issues.

Given the history and current situation in the DTES, it is not surprising to find so much research concentrating on one neighborhood. Yet because much of this research comes from the public sector and from service providers, it is often made available as reports rather than as peer-reviewed papers. Grey literature is important because it regularly includes timely original research, often provides a unique perspective on an issue, and typically indicates emerging issues. However, it is also problematic in that it often falls short of accepted principles of research as the design and data collection does not necessarily follow the rigor expected from research publications in the peer review process. A major issue of grey literature is that in some areas it constitutes the bulk of the published information and therefore tends to inform political decision. Given the lack of scientific rigor, there is a tendency to accept untested hypotheses, and furthermore, repeated citation leads to assumptions taking on the status of "fact."

The purpose of the present review is to provide a survey of the volume and type of literature that is available with respect to the DTES. We are particularly interested in research on mental health issues, including substance use disorders as well as mental disorders.

For researchers working with similar populations in other major urban centers, this review provides information concerning populations with mental health, addiction, and housing issues. It also illustrates the variety of research being conducted and the many potential solutions that exist.

METHODS

Literature Search

With the search terms "downtown eastside" or "DTES," an electronic literature search was performed on Medline (OvidSP, 1950 to April 2011), PsycINFO (1872 to April 2011), and PubMed (1947 to April 2011) for English language studies, assessments, and reports on the DTES. The same terms were used to search for grey

TABLE 1 Body of literature by methodology (quantitative or qualitative)

Method	Literature type (<i>n</i>)			
	Peer-reviewed journal articles	Dissertations	Reports	Total
Quantitative	46	13	9	68
Qualitative	8	9	5	22
Both ^a	0	3	6	9
Total	54	25	20	99

^aMixed methods (qualitative and quantitative) used within a single document

literature on UBC iRcle, the SFU Institutional Repository, and the Canadian Public Policy Collection. Google Scholar and Google Search Canada were used to find nonacademic reports from the DTES from local area and government organizations.

Criteria for Inclusion

Reports and studies were included if they presented original data relating to the DTES or used at least 30 % of participants who were recruited from or resided in the DTES. Data could be presented both quantitatively or qualitatively. Studies included were published from January 2001 to April 2011.

RESULTS

A total of 99 publications on the DTES were identified in the literature search that fit the above criteria. This body of literature consisted of 54 peer-reviewed journal articles, 20 reports, and 25 dissertations. Table 1 presents the breakdown of the body of literature by qualitative or qualitative methodology. Table 2 presents the distribution of literature by affiliation organizations.

In regards to study design, a sizable portion (19.2 %) used mixed methods. The most common methodologies used were questionnaires (56 documents), archival data analysis (24 documents), and qualitative interviews (24 documents).

In regards to theme, each document was coded for one major theme and one significant subtheme. For major themes, the five most common themes were drug use (29.3 %), health care needs and usage (19.2 %), infectious disease (18.2 %), physical health (7.1 %), and housing and homelessness (6.1 %). For subthemes, the five most common themes were drug use (24.2 %), health care needs and usage

TABLE 2 Body of literature by affiliated organizations

Method	Literature type (<i>N</i>)			
	Peer-reviewed journal articles	Dissertations	Reports	Total
UBC	51	19	1	71
BCCFE	41	7	4	52
SFU	2	6	2	10
VCH	6	0	7	13
City of Vancouver	0	0	5	5

The majority of the documents were affiliated with multiple organizations. Only the top few organizations are listed in this table

UBC University of British Columbia, BCCFE British Columbia Centre for Excellence in HIV/AIDS, SFU Simon Fraser University, VCH Vancouver Coastal Health

FIGURE 1 Major themes analyzed by year. *Other* themes include crime and policing, food security, community development, mental health, employment, pedestrian safety, violence, public order, sex work, and issues relating to women and aboriginals.

(11.0 %), infectious disease (8.0 %), and issues taken with an aboriginal (8.1 %) or women’s (7.1 %) perspective. Additionally, it was noted that 14.1 % of the documents were written to demonstrate the impact of the currently running SIF, Insite, which was implemented in Vancouver during 2003. Figure 1 presents the themes discussed in documents by year. Major themes that were described in five documents or fewer were collapsed into the category “other.” A list of the publications reviewed can be found in the [Appendix](#).

DISCUSSION

A decade of peer-reviewed research, reports, and dissertations on the DTES has resulted in studies over a wide range of issues. The main themes covered in this literature are intravenous and nonintravenous drug use, health care needs and usage, and infectious disease (e.g., HIV and HCV) related to drug use. This concentration on specific issues is not surprising given the mandate of the BCCFE, one of the major organizations responsible for the literature. Over the past decade, there was a large spike in reports focusing on intravenous drug use and infectious disease between 2004 and 2007, coinciding with the opening of Insite and subsequent literature published on the impact of this facility.

Some of the peer-reviewed literature has precipitated important policy implications directly affecting the accessibility and availability of treatment and harm-

reduction tools in the DTES, for example, legalizing pharmacy sales of needles to IDUs, keeping the SIF open from 10 p.m. to 4 a.m., using vaccination blitzes, and introducing mobile access vans. Subsequently, in 2011, the Supreme Court of Canada ruled that Insite should continue to remain open under an exemption of federal drug laws.¹⁴ The recommendations from various journal articles also underline the need to address different factors that affect IDUs such as homelessness, unemployment, social inequity, and environmental pressures. Furthermore, although there is an emphasis on treatment for HCV, HIV, and intravenous drug use, other health concerns frequently neglected in this population need more consideration. For example, eye health, oral cancer, and cervical cancer were all targeted as requiring more attention in the DTES.

A major goal of this literature survey on the DTES was to look at how mental illness is currently discussed and addressed. We believe that the extant body of peer-reviewed literature fairly represents the magnitude and variety of problems present in this area with the exception of mental and neuropsychiatric health. No peer-reviewed publications with a main theme of mental health were found, and rates of mental illness were only discussed in two articles in relation to specific subgroups (drug users and pregnant drug users).^{15,16} This lack of primary academic literature on mental health research is a key weakness in the existing literature and is perplexing given that mental health issues are continually discussed as one of the possible reasons for the presence of such a vulnerable population in such a small and specific region. For example, it was noted that mental illness is associated with a number of problems such as housing,¹⁷ the spread of infectious diseases,¹⁸ the experience of violence,^{8,19} and pedestrian injury.²⁰ Additionally, substance dependence is often discussed in relation to intravenous drug use, and is a diagnosable condition according to the DSM-IV—the current diagnostic tool for mental illnesses. Many articles recognize the staggering rate of substance dependence in this population and yet do not acknowledge that substance use is also a mental health condition strongly linked to other mental illnesses as a co-occurring disorder. This gap in the literature highlights an area that we strongly feel needs more attention given that many of the studies reviewed mention that mental illness is related to the numerous other problems in the DTES.

Much of the grey literature that was reviewed carried concordant themes. The importance of being sensitive to the unique needs of the DTES population is emphasized, as well as the need to increase accessibility and expand treatment programs and services. The grey literature similarly reports mental illness in the DTES to be associated with a number of issues such as housing,^{21,22} the experience of violence,^{23,24} and drug use.²⁵ Additionally, it discusses other issues relating to mental illness such as difficulties with the police,^{11,26} food security,^{27,28} and unemployment.^{29,30}

We have observed cases wherein specific reports from the grey literature are far more influential in bringing about change in the neighborhood than any number of peer-reviewed journal articles. Examples of widely cited reports are the 2008 and 2010 “Lost in Transition” VPD documents outlining the problems the police have with mental illness incidents: Officers are largely untrained to deal with mental illness, yet they are often the initial contact with this vulnerable population.^{11,13} These two documents also advocate an increased supply of supportive housing in Vancouver as well as the building of mental health care facilities for chronic patients. This promotion of housing and mental health care echoes reports from Vancouver Coastal Health in 2002 and 2006, which found that housing mentally ill clients leads

to decreased medical and psychiatric problems.^{31,32} The 2011 City of Vancouver Housing and Homelessness plan—the primary blueprint guiding housing policy in the City of Vancouver—borrows heavily from these VPD and VCH reports in terms of policy recommendations. However, in the body of grey literature we surveyed, we did not find any other report that made an impact on policy or program implementation.

Unfortunately, despite all of the research publications and reports, the DTES remains a neighborhood that suffers from poverty, mental illness, substance abuse, homelessness, crime, and prostitution. Mental health is not well addressed in the current body of literature, and therefore it is not surprising that we have seen such limited program and policy changes when it comes to mental health in this vulnerable population. Mental health must be considered in a range of issues, such as policy, housing, and community developments, in order to have a significant impact on such vulnerable populations such as those in the DTES. Progress is being made, in part because of peer-reviewed research and the grey literature, but many problems persist. This literature review provides an overview of the existing research, complete with strengths and weaknesses. It is our hope that this article will help guide researchers and policymakers as they pursue topics in the DTES, and ultimately, as future studies are translated into successful policies and interventions.

APPENDIX: BODY OF LITERATURE (CHRONOLOGICALLY ORDERED)

Peer-Reviewed Journal Articles

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