INTRODUCTION

The concept of “patient satisfaction”, defined as the subjective result of expectations and experiences within health systems, has gained prominence over the past several decades and is now recognized as a central component to effective addiction treatment models. Despite this acknowledgement, validated assessment instruments remain limited, particularly in the area of community-based services. This is uniquely relevant to methadone maintenance therapy (MMT) because research has shown that both patients and health care providers display significant ambivalence towards therapy, despite results suggesting a correlation between patient satisfaction and treatment outcomes.

Methadone maintenance therapy, which involves the administration of regular controlled doses of methadone, reduces the morbidity and mortality associated with heroin and other illicit drug use. Having both good oral bioavailability and a long duration of action, properly dosed methadone can effectively prevent withdrawal symptoms, reduce cravings, and block the euphoric effects of short-acting opioids. MMT for patients with substance dependence disorders is a research-validated therapeutic intervention endorsed at both the federal and provincial levels in Canada. Over the past two decades, British Columbia’s provincial MMT program has seen a dramatic increase in size from an estimated 1,221 patients in 1991 to 8,985 in 2007. In light of BC’s expanding MMT program and the growing body of research in the field of patient satisfaction, the objective of this study was to assess patient satisfaction within a provincially funded MMT program in the rural city of Prince George, British Columbia.

METHODS

Patient satisfaction was assessed using the Verona Service Satisfaction Scale for Methadone Therapy (VSSS-MT), a multi-dimensional instrument designed and validated for MMT. Next, the study investigated whether a participant’s satisfaction with MMT treatment is associated with specific participant characteristics. Subjects were recruited at the Nechako Centre, a regional addiction treatment facility that operates a conventional outpatient MMT program. This centre includes a staff of two physicians, an addictions counselor, and a program assistant. The program operates five half-days per week and does not dispense methadone on site. Ethics approval for this research was obtained from the Behavioural Ethics Research Board of the University of British Columbia (H07-02294 issued Jan 31/08; extension granted Jan 2009), as well as the Northern Health Authority (File #RRC-2007-0037 issued Feb 6/08). Informed consent was obtained from all participants.

This study is important for being the first of its kind in North America to use a scale specifically developed to assess satisfaction with methadone maintenance treatment.
In order to assess perceived/actual availability of services, for items relating to specific professional manner or activities, an additional response option of ‘not applicable’ (score = 8) was offered. For questions addressing specific interventions, participants were asked to identify if they had received a particular service. If the response was ‘yes’, satisfaction was rated as described above; if the response was ‘no’, the desired availability of the service was assessed (6 = no, 7 = yes, 8 = not applicable, 9 = do not know). This design allowed the assessment of satisfaction or dissatisfaction with received services as well as the desired availability of services not provided.

RESULTS

Of 83 patients enrolled in the Nechako Centre MMT program and invited to participate in this study, 28 (33.7%) completed the survey and necessary consent forms. These study participants ranged from 22 to 61 years of age, with a mean age of 41.8 (SD = 10). Women accounted for 53.6% of the sample. The participants were more often single (66.7%) and the majority (60%) had not completed high school. Study participants on average took a methadone dose of 75.3 mg/day (SD = 50.4), had been enrolled for 23.4 weeks (SD = 18.4), and had an average length between appointments/urine samples of 2.9 weeks (SD = 2). T-test and $\chi^2$ analysis were performed for both continuous and categorical variables respectively, and the results showed similarities in patient features between the study participants (n = 28) and non-participants (n = 55, enrolled in the MMT program but not participating in study; characteristics of this sample were obtained from record review). This suggests that the findings may be representative of the Nechako Centre MMT patient population. The only identified significant difference between these groups was a greater prevalence of prior use of marijuana (18.9% versus 50%; $\chi^2(1) = 8.52$, p = 0.004) and cocaine use (54.7% versus 85.7%; $\chi^2(1) = 7.78$, p = 0.005) amongst participants.

The mean overall satisfaction with the MMT program amongst study participants was 3.61 (SD = 1.1) on a five-point Likert scale. Figure 1 shows the distribution of overall mean satisfaction scores. The percentage of patients who felt dissatisfied (score < 3) and satisfied (score > 3), by category, were: overall, 15.8% dissatisfied vs. 49.4% satisfied; basic interventions, 10.7% vs. 63.1%; specific interventions, 31.2% vs. 33.9%; social worker skills, 8.1% vs. 42.0%; psychologist skills, 3.6% vs. 28.6%. Sample sizes reflected total number of participants who answered questions within each subscale, excluding those left blank or with all subscale questions answered ‘not applicable’. Totals did not sum to 100% because of excluded, mixed responses (score=3), or unanswered items.

### Table 1. Satisfaction with non-provision of services included in VSSS-MT specific intervention subscale

<table>
<thead>
<tr>
<th>Services Not Provided</th>
<th>Sample Size (n)$^a$</th>
<th>‘Would you desire to receive this service?$^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual social assistance</td>
<td>27</td>
<td>Yes (%) No (%)</td>
</tr>
<tr>
<td>Individual psychotherapy</td>
<td>27</td>
<td>22.2 7.4</td>
</tr>
<tr>
<td>Family psychotherapy</td>
<td>25</td>
<td>33.3 7.4</td>
</tr>
<tr>
<td>Organized recreational activity at MT centre</td>
<td>25</td>
<td>28.0 36.0</td>
</tr>
<tr>
<td>Group psychotherapy</td>
<td>25</td>
<td>40.0 24.0</td>
</tr>
<tr>
<td>Connection with steady work</td>
<td>24</td>
<td>32.0 40.0</td>
</tr>
<tr>
<td>Home assistance</td>
<td>27</td>
<td>16.7 16.7</td>
</tr>
<tr>
<td>Leisure activities away from MT centre</td>
<td>27</td>
<td>14.8 37.0</td>
</tr>
</tbody>
</table>

$^a$Sample sizes represent the number of participants who completed each specific intervention question (total study sample N = 28).

$^b$Since items answered ‘do not know’ and ‘not applicable’ are not presented, percentages do not sum to 100%.
Further analysis of the specific intervention subscale provides insight into desirable features of a MMT program. The specific intervention subscale presented items regarding non-essential services in a manner that suggested they would be available in ideal circumstances. In this way, responses to these items allowed for the assessment of perceived unmet needs, which are potential targets for reform. Upon reviewing responses to these items, socially intrusive services (i.e. ‘family psychotherapy’, ‘group psychotherapy’, and ‘home assistance’) were more often considered undesirable whereas individual and recreational services (i.e. ‘social assistance’, ‘individual psychotherapy’, ‘MMT program organized recreational activities’, and ‘assistance with non-MMT program leisure activities’) were more often identified as desirable. These findings are quantified in Table 1. Although these differences were not statistically significant due to a small sample size (Fisher’s exact/ $\chi^2$ tests, $p > 0.05$), the findings regarding less desirable services are in agreement with existing research on participant-defined ideal methadone programs.\(^{10,11}\)

Despite only representing a minority of patients from Prince George’s largest centralized methadone treatment program, this study is important for being the first of its kind in North America to use a scale specifically developed to assess satisfaction with methadone maintenance treatment (VSSS-MT). This was determined by reviewing PubMed articles resulting from a search using the MeSH terms: “Methadone” AND “Patient Satisfaction” OR “Consumer Satisfaction” AND “Substance Abuse Treatment Centers”. Similar to the findings of the Spanish team who designed the VSSS-MT,\(^8\) this sample of patients was overall slightly satisfied with MMT (mean overall score of 3.61 on the VSSS-MT). The findings of this current study suggest that improvement in overall satisfaction may lie in the further development of individual and recreational services. However, this study was unable to identify any specific MMT or patient variables that had a statistically significant influence on overall satisfaction. Low response rate and the small sample size limited the statistical significance of these findings. Future research would likely benefit from greater pre-study sensitization and focus group feedback on study design in order to address this challenge of low participation. Clearly, as British Columbia’s MMT program continues to expand, further research in this field will be needed to ensure both efficient resource allocation and continued advancement in the area of substance abuse treatment.

ACKNOWLEDGEMENTS

The UBC Faculty of Medicine and the Northern Health Authority supported this research. This research was made possible by the gracious translation and sharing of the VSSS-MT research tool by Jose Perez de los Cobos, MD with the University of Barcelona Medical School; the guidance and support of Gary Poole, PhD of UBC Healthcare and Epidemiology; and Lawrence Fredeen, MD of UBC Family Medicine. The author is grateful to the Central Interior Native Health Society staff for their support; to Audrey Fillion and Margaret Grover with the Nechako Centre for their assistance in gathering data; to Brendan Connors, PhD candidate with the Behavioural Ecology Research Group at Simon Fraser University for his technical assistance; and to Joseph Connors, MD for his editorial guidance. This paper is dedicated to the memory of Cecil. 

REFERENCES