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Original Study

Development and Evaluation of a Student-Led Mental Health Promotion Workshop to Address Community Needs for Marginalized Populations in Urban Northern Ontario, Canada

A Process

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Abstract

Background: Compass North is a student-led health outreach initiative in Thunder Bay, Ontario, Canada. A current unmet need in Thunder Bay identified in a previously published community needs assessment is mental health services. Women, youth, senior, Indigenous, and LGBT2-SQ populations were disproportionately affected. In response to these perceived gaps in services, a subcommittee of Compass North developed, delivered, and evaluated mental health workshops.
Methods: Affiliations with Shelter House Thunder Bay (SH) and Anishnawbe Mushkiki Thunder Bay Aboriginal Health Access Centre (AM) were established. Six interactive workshops were developed and delivered over eight months. Likert scale-based evaluation surveys gauging workshop participant and presenter satisfaction with content were used. Attendance and return attendance were additional markers of success.
Results: A total of 36 participant surveys were completed between both sites. Response rates were 74% and 84% at SH and AM, respectively. Workshop content was well-received by participants and helped address some unmet health education needs. Attendance increased with time at SH.
Conclusions: These interactive workshops are one way of addressing unmet community needs in Thunder Bay while maintaining a community presence prior to establishing a fully functional student-run clinic (SRC). They comprise a potentially valuable stage in development of a SRC.

Background

Student-run clinics (SRCs) are primary healthcare outlets championed by student volunteers from varied health-related disciplines.[1] They often serve marginalized populations that, for various reasons, are less likely to access healthcare services.[1] SRCs constitute opportunities for interprofessional education, increasing social accountability, promoting student research, and developing clinical skills.[2,3] They also combat the phenomenon of "vanquishing virtue" (i.e. loss of altruism through professional socialization) observed in medical students.[2,4] In Canada, seven SRCs exist in five provinces (as of 2015).[5] Compass North Student-Lead Health Outreach (CN) in Thunder Bay, Ontario is a prospective SRC.

With a population of approximately 108,000, Thunder Bay is the largest urban center in Northwestern Ontario and is a healthcare hub for the many surrounding rural, remote, and fly-in communities.[6] CN is an initiative established in 2013 and organized by students and staff from Northern Ontario School of Medicine (NOSM) West Campus and Lakehead University, both based in

Thunder Bay. CN's interprofessional team includes student and professional volunteers from medical, kinesiology, legal, nursing, social work, and occupational therapy backgrounds.

Undergraduate medical students at NOSM can develop and participate in service-learning (SL) projects, whereby students help address identified community needs with specific partner organizations. In 2014-2015, a SL community needs assessment identified specific primary health concerns as well as service barriers and gaps for discrete populations in Thunder Bay, Ontario.[7] These populations included Indigenous (First Nations, Inuit, and Métis), LGBT2-SQ (lesbian, gay, bisexual, transgender, two-spirit, and queer/questioning), senior, women, and youth communities. Perceived gaps in care pertained to preventative medicine, system navigation, and emergency, mental health, mobile, and walk-in services.[7]

In 2015-2016, longitudinal health promotion workshop curricula and evaluation were developed in partnership with two Thunder Bay-based agencies, Anishnawbe Mushkiki (AM) and Shelter House Thunder Bay (SH), to address some of the established gaps in care and contribute to the fulfilment of NOSM's social accountability mandate. AM is an Indigenous-run primary healthcare nonprofit organization. In addition to community education and health promotion workshops, it has a nurse practitioner-led clinic component and is the Thunder Bay Aboriginal Health Access Centre.[8] SH provides basic needs and additional health services for people living in poverty in Thunder Bay.[9]

Ten medical student volunteers from CN established a SL committee to design and implement a longitudinal health promotion workshop series for Thunder Bay to address the identified unmet community needs.[7,10] This project was completed over the 2015-2016 academic year. The workshops' target audience was based on three criteria: Thunder Bay's demographics, the populations identified in the needs assessment, and the social determinants of health.[11] The target audience included people living homeless; low-income, Indigenous, and/or LGBT2-SQ individuals; unattached patients; women; youth; and seniors. Educational themes were based on needs assessment findings and included mental health, health system navigation and coordination, basic needs, and developing new skills.

This paper outlines the program development process and short-term outcomes of these student-run health promotion workshops as a stage in SRC evolution.

Methods

Program Development

A "5Ws and 1H" framework was employed to help students conceptualize why health education workshops were necessary, for whom they were intended, what their content would address, where and when they would take place, and how they would be orchestrated (Figure 1).

Figure 1. The "5Ws and 1H" Framework for Workshop Planning

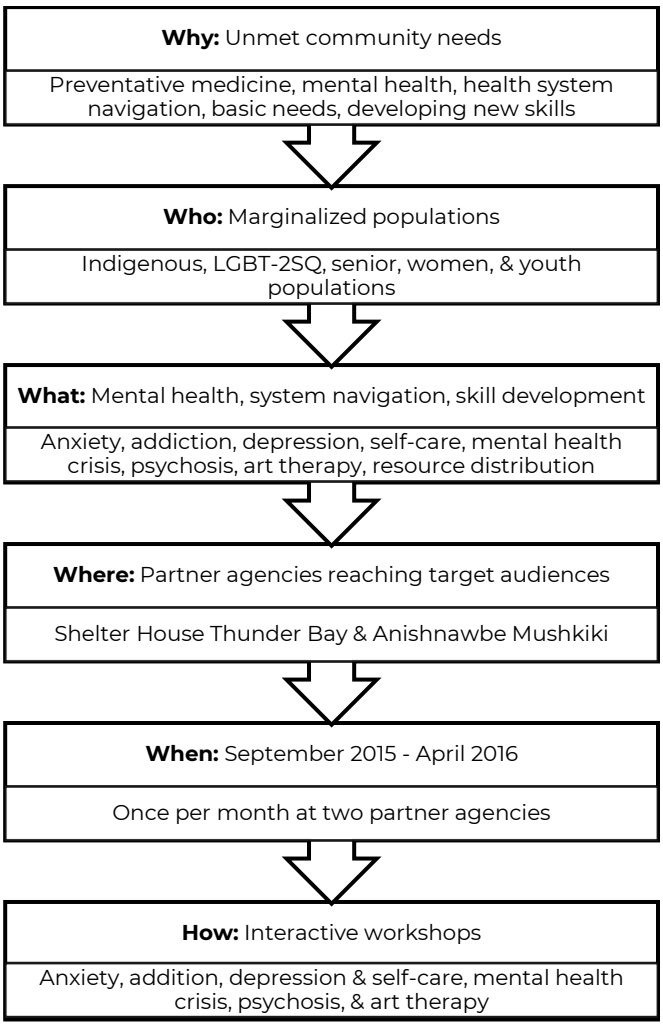
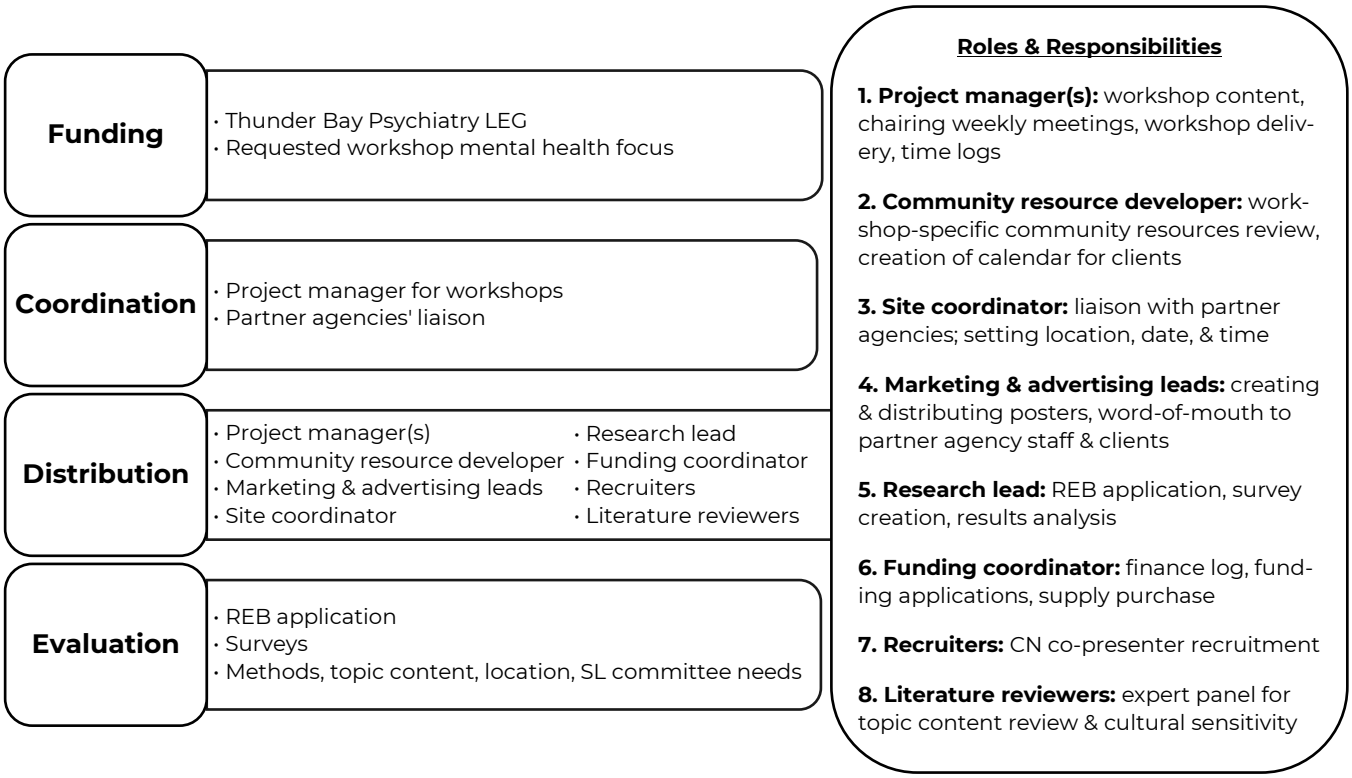


Figure 2. Workshop Stages of Development



CN = Compass North; LEG = Local Education Group; REB = research ethics board; SL = service learning

AM and SH, identified as potential partner organizations in the needs assessment, were recruited to help develop the workshop series for delivery at each organization. A total of six topics for both sites (12 one-hour long workshops total) were chosen for delivery over an eight-month period. Curricula were intended to address mental health needs and included themes related to anxiety (Workshop 1; W1), addiction (W2), depression and self-care (W3), recognizing mental health crisis (W4), psychosis (W5), and therapy through artistic expression (W6). Workshops included both didactic (PowerPoint and whiteboard) and interactive (discussion and/or activity) components. Funding was provided by the Thunder Bay Psychiatry Local Education Group (LEG) with the expectation workshop content would help address community mental health needs.

International efforts to engage minority groups in community workshops involving dialogue and engagement as a means of mental health education and stigma reduction have demonstrated potential.[12] While resources on workshop design for mental health discussions among the specific target marginalized groups were scarce, workshop format conformed to established effective community mental health workshop design in Canada and were approved by partner organizations.[13,14] Existing relevant mental health resources were therefore adapted to develop workshop materials in consultation with partner organization staff and on the basis of the completed needs assessment. Topics reflected partner organizations' clients and goals.

Through a rotating schedule of responsibilities organized via a common Google Drive, SL committee members developed workshops conforming to a standard template, accumulated reusable workshop supplies, organized weekly meetings, recorded time and financial contributions, and coordinated workshop delivery (Figure 2). A checklist tool was developed to assist project managers with ensuring all tasks were completed prior to workshop delivery. Compilation of community resources relevant to workshop topics was organized into a comprehensive one-

page double-sided take-home document.

Each workshop topic was assigned a CN professional volunteer as consultant topic expert. This individual was chosen based on field of expertise. In addition to the professional reviewer, the project supervisor (a family physician) reviewed presentation content as additional quality control. While the SL committee and CN did not have specific public health representatives, three SL committee members had obtained master's degrees pertinent to public education (in community health and epidemiology, epidemiology, and public health) before attending medical school.

For successful implementation, the health promotion workshop series required external funding provided by the LEG, represented on the CN professional advisory committee. Cost expenditures were anticipated for advertising, workshop materials, and attendance incentives (healthy food, bottled water, and two bus tickets).

Correspondence between SL committee members, sponsors, partner organizations, CN, and NOSM's SL academic evaluation committee was ongoing throughout the project.

Workshop Evaluation

Evaluation as a means of continuous quality improvement for subsequent workshops was planned. Workshop participants and presenters completed brief post-workshop surveys developed by the SL student committee. Plain language (average grade level of 5.2 between Flesch-Kincaid Grade Level and Gunning Fog, Coleman-Liau, Simple Measure of Gobbledygook, and Automated Readability Indices) was used as health information readability should generally be no higher than sixth to eighth grade.[15,16] A SL committee member reviewed the consent form with participants and answered questions related to the form or survey. To reduce social desirability bias, each workshop delivery team included two SL committee leads and at least one survey lead to distinguish between students delivering the workshop and student(s) collecting surveys.[17] Survey development leads were involved in the delivery of one workshop each, for which a different SL member would collect surveys.

Participant surveys consisted of 12 items including language preference (English, French, Anishinaabemowin/Ojibway, and other), seven three-point (agree, neutral, disagree) Likert scale questions assessing aspects of workshop content and delivery (usefulness, interest, and enjoyment), and three open-ended questions on participants' learning and suggestions for future workshops. Space was provided for additional comments.

Workshop presenters completed a nine-item online questionnaire to assess presenter perceptions of participant engagement, workshop success, and suggestions for future workshops.

Following survey collection, two members of the SL committee gathered survey responses, identified themes in the results, and shared the results with the SL committee.

The Lakehead University Research Ethics Board approved this study. All SL committee members completed Tri-Council Policy Statement: Ethical Conduct for research Involving Humans and Research Ethics certification.

Descriptive statistics were used to portray data as frequencies and percentages. Data were plotted in figures using Microsoft® Excel 2016 for Mac (Version 15.22). Qualitative data were analyzed using thematic data analysis.[16] Themes were identified by the coder most familiar with the data. Codes were defined and data were coded by two independent coders.

Results

Nine workshops were delivered on six topics over eight months (three workshops were delivered twice). Each workshop was structured in accordance with a standard template (Figure 3). Some included an interactive activity focused on self-care and creative outlets for coping. All encouraged reflection on existing positive behaviors and development of new ones to manage individual challenges. Workshop details are summarized in Table 1.

For delivered workshops, excluding W6, an average of 5 participants attended workshops at SH and 7 at AM. A total of 36 participant surveys were completed between both sites. Response rates were 74% and 84% at SH and AM, respectively. Participant data from the final three-day work-

Figure 3. Standard Workshop Template

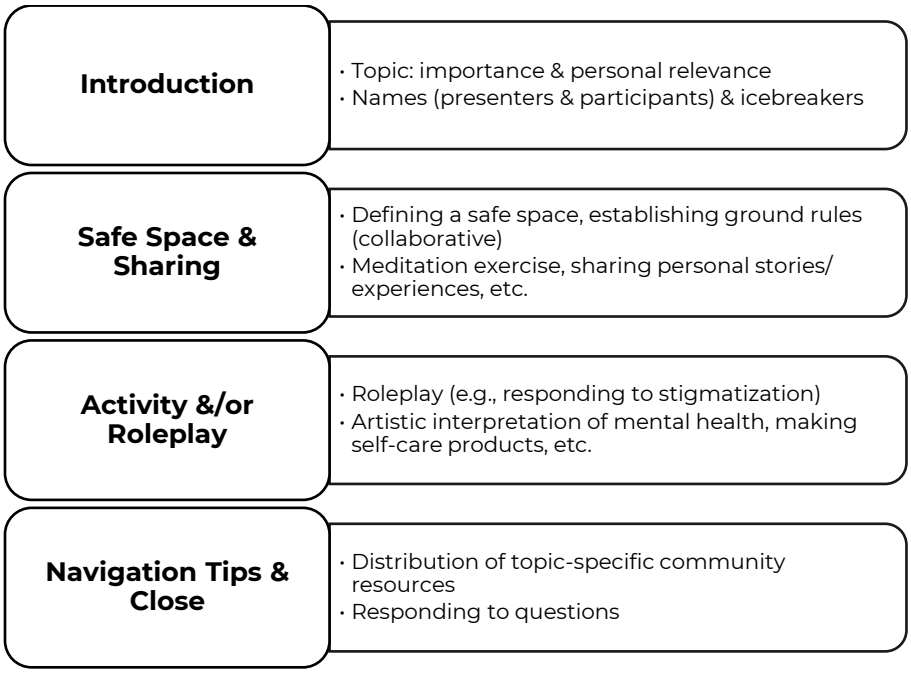


Table 1. Workshop Topics and Details

Workshop	Title	Activity	Sites	Presenters
1	*Dealing with Anxiety*	Bracelet making	SH	3 medical students
2	*Addiction & Overdose*	Group discussion	SH	3 medical students
3	*Hygiene & Depression*	Making self-care products with low-cost kitchen supplies	SH, AM	3 medical students
4	*Recognizing Mental Health Crisis*	Group discussion	SH	3 medical students, 1 kinesiology student
5	*Dealing with Psychosis*	Activity sheet	SH, AM	3 medical students
6	*Artistic Expression/PhotoVoice*	Photography, drawing, & painting as creative outlets	SH, AM	9 medical students, 1 nursing student, 1 kinesiology student

AM = Anishnawbe Mushkiki; SH = Shelter House

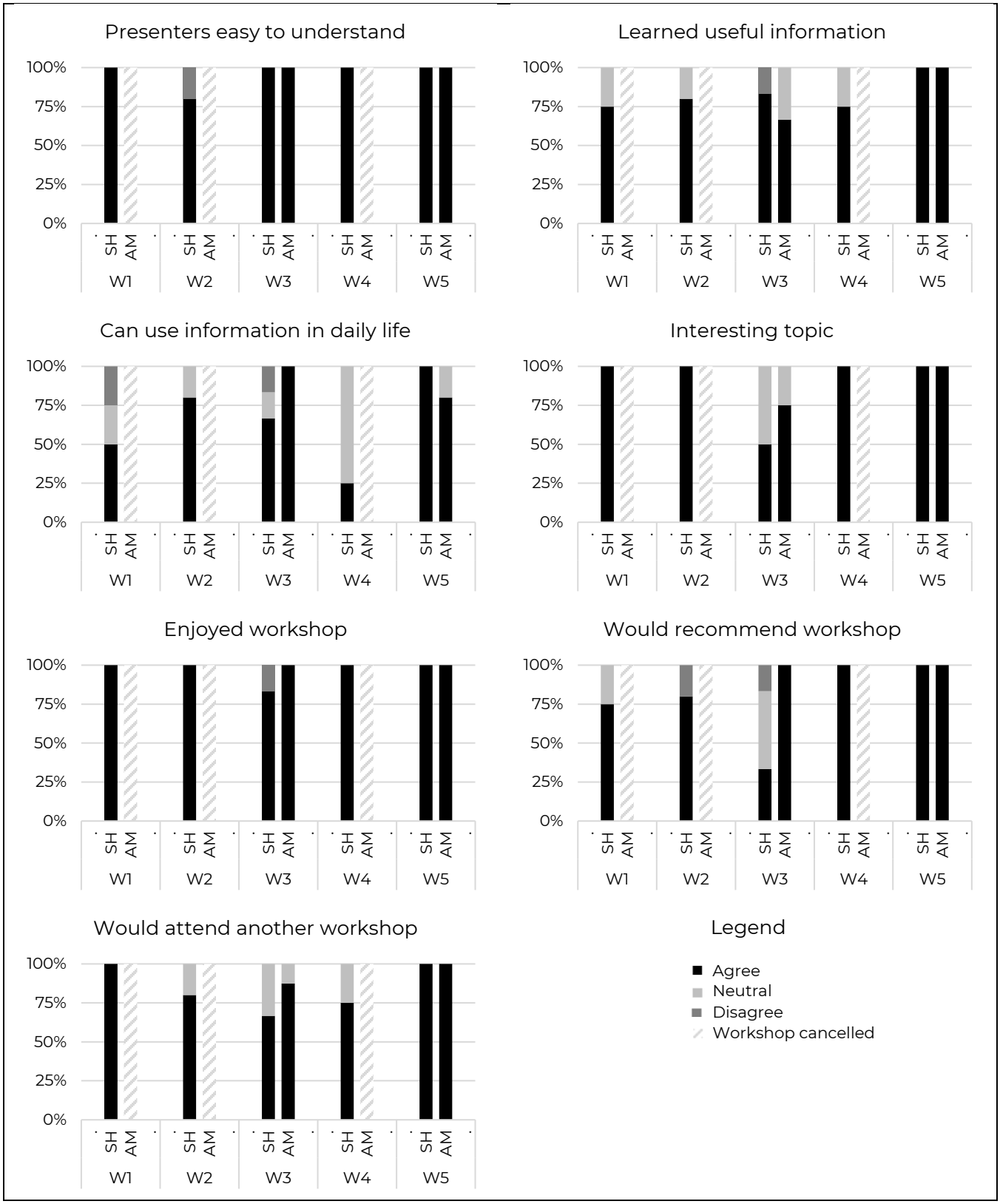
shop are not presented here, as participant attendance and survey completion were inconsistent at both sites. Thirty-one surveys were completed by 12 independent presenters (response rate of 94%).

Participant Data

Participant surveys indicated globally positive responses to workshops. There was marked variation in participant responses across several workshops (Figure 4).

Open-ended improvement questions yielded little comment from participants. Several (n=3) focused on the provision of additional information or time and more information about coping skills (n=2). One open-ended question on workshop content revealed all participants were capable of identifying personally pertinent "take-

Figure 4. Participant Satisfaction Survey Responses (Workshops 1-5)



home messages" for each workshop. Suggestions for future workshops included: depression, coping strategies, and more information about drug use and cessation strategies. Most comments reiterated responses to closed-ended questions or were complimentary towards the workshop and presenters. A participant from W2 requested an emphasis on the need for change at the level of government.

Presenter Data

Presenter feedback was largely positive regarding personal and perceived participant experiences, with no notable difference between sites or workshops delivered.

Presenter comments focused on how to enhance participation, improve participant experience, and mediate existing challenges. Table 2 summarizes the qualitative data-based conclusions from presenters. W6, due to its multi-day approach, led to unique reflections from students, highlighting specific challenges related to longitudinal workshop delivery. Despite difficulties, W6 was generally well perceived, with only one presenter indicating they would not recommend running the final workshop again.

Discussion

Workshop Development

Using a qualitative, observation-based approach in conjunction with longitudinal surveys, the SL committee implemented several specific organizational techniques to develop health-focused workshops. These included: employing effective closed-loop communication, sharing leadership, defining tasks early in the process, maintaining firm deadlines, holding regular meetings, engaging in ongoing evaluation and quality improvement, having accessible supervisors, and capitalizing on individual talents. This approach provided opportunities for students consistent with findings of SRC-related professional skills development projects reported elsewhere.[2,19]

The logistics of workshop implementation were at times complex. Two significant aspects were the involvement of accessible supervisors and engagement of stakeholders. Despite careful preparation of workshop materials, consultation with a designated professional topic expert, and discussion with the host organization, it was difficult to gauge participant interest or temperament in advance. Within the partner organizations, clients often differed weekly. Considering this, ongoing workshop evaluation permitted improvement of workshop delivery and participant engagement month to month. Most importantly, it permitted flexibility of workshop delivery so future presentations might better engage participants. This was most apparent with W3, for which both presenters felt workshop content was not adequately conveyed and a better approach was needed. Team members discussed what improvements could be made in the standard post-workshop meeting. In this way, workshops became works in progress.

The results of this study support the notion strong partnerships with select local organizations provide a means of connecting with marginalized populations. These partnerships allow for the provision of sustainable health promotion services that may expand into clinical services with time.[2,20] Community partnerships also improve student initiative visibility and support continuity of care.[20]

Workshop Attendance

Workshop attendance was variable but more consistent at SH than AM. SH's consistency may be due to the higher regularity of drop-in clients, as it was easiest to recruit participants already at the institution at the time of the workshop. In contrast, AM had more appointment-based clientele. Increasing attendance at SH over time may be attributed to increased familiarity with CN, the regularity of scheduled workshops, and improved word-of-mouth recruitment methods.

AM workshops were less well attended than those at SH. A spike in attendance was observed for a workshop scheduled after a separate AM event. As such, presenters aimed to schedule subsequent workshops around previously planned clinic events.

Promotional posters were distributed at specific locations around Thunder Bay to maximize target audience exposure. Since most recruiting at SH occurred directly before scheduled workshop times, incentives such as free bus tickets and healthy snacks were initially advertised. However, presenters observed some participants had

Table 2. Summary of Presenter Conclusions Based on Qualitative Data Analysis

Workshop Delivery	
Teaching Style	Must establish balance between formal teaching, discussion, & interactive components.
Workshop Venue & Setup	Venue & delivery must support participant needs.
Recruitment & Scheduling	
Recruitment Strategies	Strategies should target interest versus attendance & may benefit from presenter continuity.
Program Scheduling	Scheduling workshops around existing programming may improve attendance, but participant autonomy must be respected.
Workshop Content	
Future Topics/Foci	Should focus on enhancing practical skills.
Refinement of Message	Strategies of message refinement may include: elimination of unnecessary educational content, attention to sensitive terminology, message simplification, & allowing for flexibility.
Student Lessons	
Relatability	Presenters learned to engage with participants in a meaningful way.
Differences in Experience	Future workshop resources should be reviewed with participants for their perceived value & barriers.
Group Dynamics	Establishing inclusive group dynamics is important.
Presenter Competency	Additional training or support are needed to deal with specific scenarios.
Participant Experience	
Perceived Experience	Presenters perceived a positive experience for participants, as participants often stimulated conversations & introduced new ways of thinking about controversial topics.
Communication	Workshops allowed some participants to overcome potential communication barriers.
Workshop 6: A Unique Challenge	
Overall Impression	Well-received despite challenges.
Challenges	A longitudinal workshop requiring follow-up is particularly challenging. It may be beneficial to deliver the entire workshop at one time &/or use a more personalized approach.

little interest in workshop topics and may have attended primarily to collect incentives. Presenters felt these participants were less engaged in workshop material and were more disruptive, decreasing overall presenter satisfaction. To reduce the number of disengaged participants, the SL committee decided to eliminate advertising incentives as part of future recruitment efforts, with hopes future participants would attend motivated by topic interest.

There were fluctuations in workshop attendance, but this incremental approach showed some success over the course of the study period, particularly at SH, where workshops took place at the same time every week. Though attendance, location, and time varied at AM, this offered insight into the process of building community partnerships. Regular and open contact between the SL committee and AM permitted workshops to be delivered consistently, even in times of upheaval for the host organization (i.e. mid-project geographical relocation of facilities). As with most student-run initiatives, CN's adaptability was an asset.[21]

Participant Satisfaction

Participant satisfaction rates varied by workshop but were generally high. This is consistent with other findings of high rates of learner satisfaction with educational workshops featuring interactive components.[22] While some written feedback provided by participants was not directly constructive to workshop development, it did indicate participant engagement and

learning. This suggested that participants understood workshop curricula and left with personally relevant information. Social desirability bias is a possible influence.[17]

Presenter Satisfaction

Presenter satisfaction varied by topic and location. Presenters perceived specific topics as less positively received by participants. One such workshop was W2. Addiction is a topic that presenters observed elicited strong emotional reactions from some participants. During the post-workshop debriefing session, presenters acknowledged the importance of recognizing potentially sensitive topics and having strategies determined in advance to address disruptive participants or participants who might require additional support. Following W2, presenters developed a new approach that included having an additional CN volunteer who could invite distressed participants to leave the workshop and discuss their thoughts and feelings freely with trained partner organization staff.

Limitations

Evaluation of CN workshops included both quantitative and qualitative methods. Ideally, the student survey leads would not have been involved in workshop delivery, as this is a potential source of significant bias.[17] However, this was not feasible due to the relatively small size of the SL committee. Given the nature of this student enterprise, sufficient resources were also unavailable for independent data analysis. While surveys were distributed at the end of each workshop to participants and workshop presenters and provide some metric of individual workshop success, the small sample size precludes generalization to other participant populations and presenters and may compromise study validity and reliability.[23] Moreover, adequate representation of all target marginalized groups cannot be guaranteed, particularly as questions on participant demographics were limited.

The participant consent form and survey emphasized no identifying information would be released. Initially, a unique coded identifier based on birthdate and mother's initials was assigned to participants. This was to assess whether participants returned for workshops, a proxy of participant satisfaction and engagement. However, asking participants' mothers' initials triggered painful memories for some. For this reason, unique identifiers were eliminated for W3 and subsequent workshops. Additionally, repeat attendance as proxy for satisfaction was determined inadequate as the workshops progressed, as many factors influenced whether a participant returned (e.g., some participants reside at SH for a short-term basis only).

Completion of surveys by community partner staff to gain further insight into the engagement of clients compared to typical programming would have been useful. Unfortunately, due to the demands of their work, staff were not able to attend workshops and could not contribute meaningfully to program evaluation.

In the future, adapting workshops to each site's distinct client population is advised.

Conclusions

Health promotion workshops are an effective means of engaging community members and addressing self-reported unmet community needs. These workshops comprise an essential step in CN's development as a SRC. Future research will include evaluation of expanding health outreach and clinical services, with a focus on recruitment strategies, participant engagement, and efficacy with measurable outcomes. CN has implemented most of the workshops as regular programming to provide sustainable health outreach to the Thunder Bay community and continue to promote CN as an option for filling gaps in community-based healthcare.

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Disclosures

The authors have no conflicts of interest to disclose.

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