



“Bridging the C’s”: Development and evaluation of innovative peer-led physical activity programs for mental health service users

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No Conflicts of Interest

vancouver
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**British Columbia Schizophrenia
Society
Prince George Branch**

Partnerships:

Northern Medical Program

University of Northern BC

Northern Health

BC Schizophrenia Society

Vancouver Foundation

Chinook Yoga

YMCA



**YMCA of
Northern BC**

*Building healthy
communities*



The British Columbia Schizophrenia Society for the Northern Interior, are family members & individuals affected by mental illness & addictions working with service providers to achieve a more comprehensive continuum of mental health & addictions services.

(www.bcsspbranch.org)

prevalence of type 2 diabetes in individuals with schizophrenia is 2–4 times higher than that in the general population (Holt et al., 2005; Zuk et al., 2008).

The BCSSNI officially opened the Activity Centre for Empowerment [ACE] in 2004. (www.bcsspface.org)



**British Columbia Schizophrenia Society
Prince George Branch**

BRIEF REPORT

Healthy Living? By Whose Standards? Engaging Mental Health Service Recipients to Understand Their Perspectives of, and Barriers to, Healthy Living

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Objective: It is well recognized that mental health service recipients experience high rates of cardiometabolic disorders, have poorer diets, and exercise less than the general population. This study sought to explore the meaning of a healthy lifestyle for this population and the barriers they experience to healthy living. **Method:** Focus groups were conducted with 23 individuals who experience serious mental health issues. The meaning of a healthy lifestyle and the barriers participants experience to living healthily were explored. **Results:** Participants perceived a healthy lifestyle in broader terms than professional guidelines for exercise and diet. A broad framework including friendship, affordable safe housing, employment, spiritual, and emotional good health, as well as healthy eating and exercise, is described. Barriers identified by participants were poor mental and physical health and stigma (structural, social, and self). An unexpected result was the group problem solving that occurred during the focus groups. **Conclusions and Implications for Practice:** Health care professionals need to understand mental health service recipients' perspectives of a "healthy lifestyle." An understanding of barriers within this context is required, as only then will we be able to empathize and assist as health care professionals. This study also shows that realistic, innovative, and pragmatic solutions occur when mental health service recipients are empowered.

Keywords: mental illness, health, lifestyle

Research Article

A Qualitative Study Exploring Facilitators for Improved Health Behaviors and Health Behavior Programs: Mental Health Service Users' Perspectives

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Received 13 February 2014; Revised 17 April 2014; Accepted 20 April 2014; Published 6 May 2014

Academic Editor: Angela J. Torres

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Objective. Mental health service users experience high rates of cardiometabolic disorders and have a 20–25% shorter life expectancy than the general population from such disorders. Clinician-led health behavior programs have shown moderate improvements, for mental health service users, in managing aspects of cardiometabolic disorders. This study sought to potentially enhance health initiatives by exploring (1) facilitators that help mental health service users engage in better health behaviors and (2) the types of health programs mental health service users want to develop. **Methods.** A qualitative study utilizing focus groups was conducted with 37 mental health service users attending a psychosocial rehabilitation center, in Northern British Columbia, Canada. **Results.** Four major facilitator themes were identified: (1) factors of empowerment, self-value, and personal growth; (2) the need for social support; (3) pragmatic aspects of motivation and planning; and (4) access. Participants believed that engaging with programs of physical activity, nutrition, creativity, and illness support would motivate them to live more healthily. **Conclusions and Implications for Practice.** Being able to contribute to health behavior programs, feeling valued and able to experience personal growth are vital factors to engage mental health service users in health programs. Clinicians and health care policy makers need to account for these considerations to improve success of health improvement initiatives for this population.

Background

Individuals with severe mental illness (SMI) have elevated rates of physical ill health including **cardio-metabolic disease** (Olfson et al., 2015; Saha et al., 2007)

prevalence of type 2 diabetes in individuals with schizophrenia is 2–4 times higher than that in the general population (Holt et al., 2005; Mezuk et al., 2008).

Type 2 diabetes in individuals with schizophrenia is 2–4 times higher than in the general population (Holt et al., 2005; Mezuk et al., 2008)

Individuals with SMI have a 20% shorter life expectancy (Marder et al., 2004)

Lifestyle factors include rates of smoking, excess caloric intake, poor diet, & lack of exercise (Nolte & Martin, 2008; Robson & Gray, 2007)

Targeted behavioral interventions show clinically significant health improvements & impact on cardiometabolic risk reduction for MHSUs

(Bartels et al., 2013, 2015; Daumit et al., 2013; Green et al., 2015)

Attrition from such programs by individuals with SMI is reported to be high (Brown & Chan, 2006; Kemp et al., 2009).

| Barriers | Facilitators |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Illness symptoms (Ussher et al., 2007, Graham et al., 2013) | Motivation (Graham et al., 2014) |
| Medication side-effects (Graham et al., 2013; Soundy et al., 2007) | Access (Graham et al., 2014) |
| Stigma (Graham et al., 2013) | Empowerment/personal growth (Graham et al., 2014) |
| Minimal support (Soundy et al., 2007) | Peer Support (Browne et al., 2016; Graham et al., 2014; McKibben et al., 2014; Naslund et al., 2016) |

Peer-led interventions: an under-utilized approach

- **Peer-facilitation is effective** (Ashton et al., 2013; Dickerson et al., 2016; Druss et al., 2010 Ford et al., 2013)
- **Provides social support & role-modeling** (Gray et al., 2013)
- **Promising model to increase effectiveness & reach of health interventions** (Chinman et al., 2014; Ginis et al., 2013).

Purpose

- Explore program feasibility & acceptability

prevalence of type 2 diabetes in individuals with schizophrenia is 2–4 times higher than that in the general population (Lewinsohn et al., 2010)

- Evaluate peer-developed & peer-led physical activity programs tailored for MHSUs

Theoretical framework

Informed by:

- 1) Self-determination theory (SDT)
(Deci & Ryan, 2000; 2012; 2014).
- 2) Community-based participatory research
(Israel et al., 1998; 2005)

Producing:

- 3) **Participant And Community Empowerment (PACE)**
(Graham et al., 2017 in preparation)

Physical Activity Programs

- 1) Peer-led walking program;
- 2) Yoga program;
- 3) Fitness program developed with the YMCA.

**Questions?
Concerns?
Comments?**

Please contact the Activity Centre for Empowerment (ACE) with any questions about the information in this pamphlet:

ACE
1131-6th Avenue
Prince George, BC
V2L 5G5
Phone: (250)564-3396
Fax: (250)562-8015
Email: reception@ace

Bridging the G's: Community, Connectedness, and Collaborative Partnerships to improve the Cardio-metabolic health of individuals with enduring mental illness

Physical Activity Initiative





**ACE
Walking
Groups**

**Start walking!
Here's how:**

Step 1: Choose the walking level that is right for you:

- Beginner: 10–20 minute walks on a flat surface
- Advanced: walks up to 1 hour, includes trail hiking

Step 2: Equipment check:

- Walking shoes *
- Rain poncho/umbrella, water bottle, pedometer, log book (optional—these items may be available for you at the ACE)

Step 3: Contact the Centre Coordinator at the ACE to join a group and start walking!

Need shoes? 

Funding for fitness equipment such as sneakers may be available through Consumer and Family Initiative Funds. For more information and to fill out an application please see Nansi at ACE or email mentalhealthadvisory@googlegroups.com

Transportation

Meeting up with your group: Many walks will begin at ACE. A PG Transit bus pass may be necessary to meet your group for certain walks. Bus passes can be provided for Walking Group members—please see the ACE Coordinator for more details.

PG Transit bus routes (from stop at 7th and Dominion):
To the Pine Centre Mall: #46
To UNBC (or Foothills and 15th Ave): #15
To YMCA/ Masich Place: #46

Summer/outdoor routes 

Beginner: Tuesday and Friday
Walk #1: Begin at ACE, walk a loop around the building and repeat 4 times (distance = 1 km)
Walk #2: Begin at the ACE, walk to Tim Horton's, and return to ACE after a break. (0.7 km one way)

Advanced: Mon., Wed., Friday
Walk #1: Begin 15th Ave and Foot-hills, walk up University Hill to UNBC and return (6 km)
Walk #2: Begin Masich Place, walk to Ospika, continue to Tyner Blvd, end at Walmart (7 km one way)

Winter/indoor routes 

Beginner:
- Pine Centre Mall (Take bus #46)
- PG Coliseum Indoor track (meet at ACE)
Advanced:
UNBC Northern Sports Centre Indoor Track (Take bus #15)



a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

Faculty of Medicine



Evaluation

Focus groups (6- and 12-month)

“How has it been participating in the health program(s) you have been involved with?”

“Have you observed any benefits / harms in participating?”

“What has worked well for you / what has been difficult for you in the program(s)?”

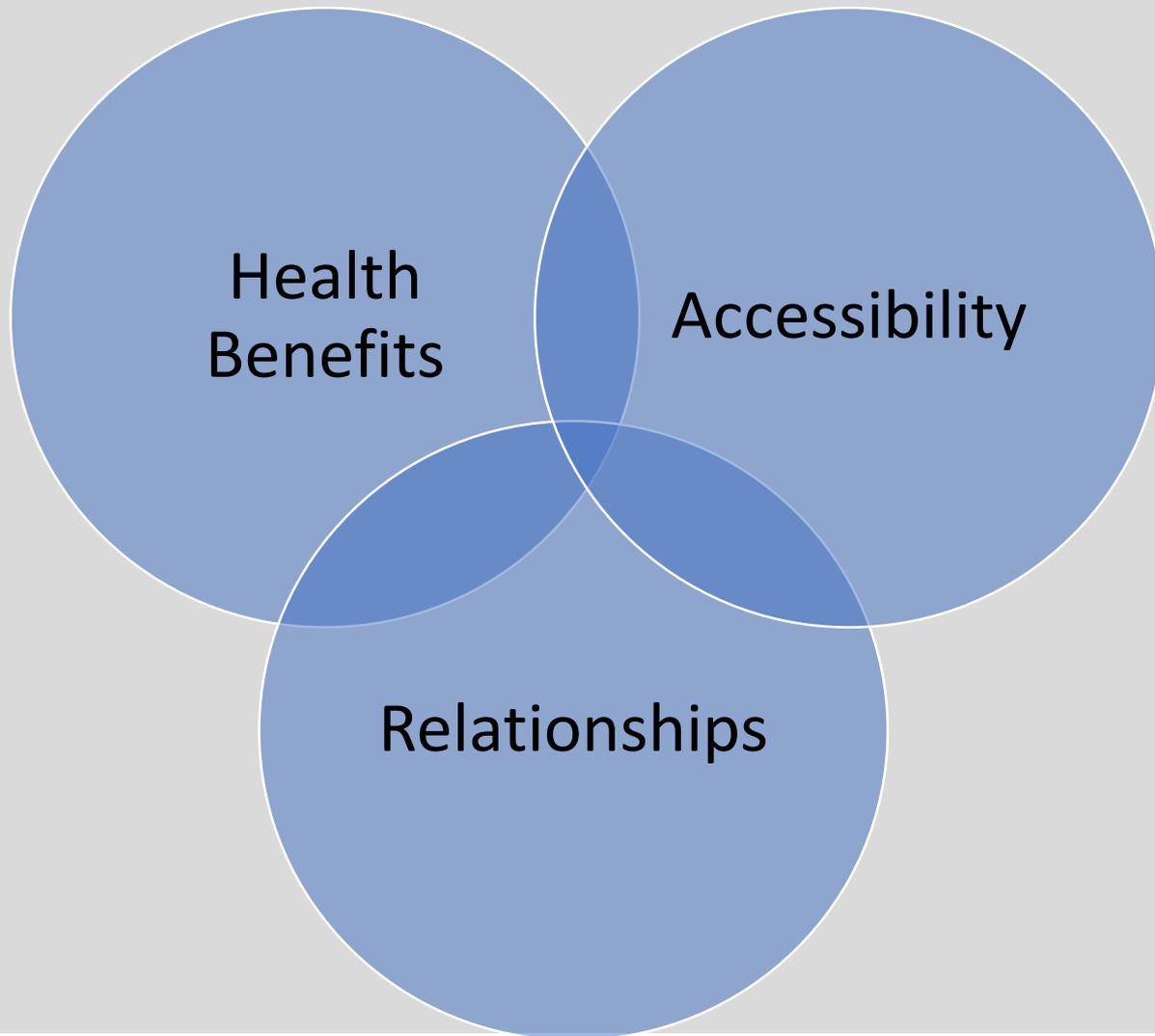
“How could it be changed to be better?”

| DEMOGRAPHICS | Baseline (n=33) | Mid-point (6-month) (n=21) | End-point (12-month) (n=15) |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gender | <i>n</i> (% of sample) | <i>n</i> (% of sample) | <i>n</i> (% of sample) |
| Male | 8 (24.24%) | 4 (19.05%) | 4 (26.67%) |
| Female | 25 (75.76%) | 17 (80.95%) | 11 (73.33%) |
| Age range | 26 - 73(mean _{age} =50.09) | 26-72 (mean _{age} =50) | 33 – 72 (mean _{age} =53) |
| Diagnoses* | Schizophrenia spectrum disorders 8 (24.24%) Bipolar and related disorders 6 (18.18%) Depressive disorders 10 (30.30%) Anxiety disorders 5 (15.15%) Obsessive-compulsive disorder 1 (3.03%) Trauma and stress-related disorders 2 (6.10%) Substance and addictive disorders 1 (3.03%) *Note. 18 participants had disorder comorbidity. | Schizophrenia spectrum disorders 7 (33.33%) Bipolar and related disorders 5 (23.80%) Depressive disorders 6 (28.57%) Anxiety disorders 6 (28.57%) Obsessive-compulsive disorders 1 (4.76%) Trauma and stress-related disorders 2 (9.52%) Substance and addictive disorders 1 (4.76%) *Note. 11 participants had disorder comorbidity. | Schizophrenia spectrum disorders 5 (33.33%) Bipolar and related disorders 2 (13.33%) Depressive disorders 4 (26.67%) Anxiety disorders 5 (33.33%) Obsessive-compulsive disorders 1 (6.67%) Trauma and stress-related disorders 1 (6.67%) Substance and addictive disorders 1 (6.67%) *Note. 8 participants had disorder comorbidity. |

Analysis

- Iterative process
- Grounded Theory Informed Thematic analysis
- Development of themes, concepts & theory emerging at 6 and 12 months

RESULTS



| A. Health Benefits | Physical | Psychological |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Exemplary quotes | “I’ve lost weight and my hips are feeling better than they used to be and the arthritis is not as bad as it used to be”. | “(Yoga) made me so relaxed...it was just so quiet and peaceful and...your mind just cleared...” |
| | “I find it increases your endurance, it’s healthy for you.” | “I think it’s been a good mood lifter for me.” |
| | “I have seen some strength improvements & some alertness improvements.” | “I was very depressed for a long time there and this has been part of that helping to get out of it.” |

| B. Accessibility | Geographic | Cost | Program Flexibility |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Exemplary quotes</p> | <p><i>Proximity</i></p> <p>“I would’ve participated a lot if I didn’t have to go all the way to the (sports centre). For me that was just a bit much”.</p> | <p>“For some people, that’s food for the month (cost of transportation and facility or class fee), \$20 bucks.”</p> | <p><i>Scheduling</i></p> <p>“I’m so glad that I have that (flexibility) and that the members that are quite regular don’t hold it against me that I’m not able to attend regularly.”</p> |
| | <p><i>Psychosocial ‘fit’</i></p> <p>“We’re comfortable here, this is a comfortable safe place (the ACE) and to me that makes a big difference.”</p> | <p>“The (sport centre), it’s a beautiful track, it’s gorgeous, but...a person on disability cannot afford it. It’s a rich man’s track.”</p> | <p><i>Ability</i></p> <p>“I love the fact that there’s different groups for different people. So it’s tailored for everybody’s needs.”</p> |
| | | | |

| C. Relationships | Self | Peers | Community |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Exemplary quotes</p> | <p>“Certain participants take it upon themselves to [walk] themselves so...that shows that the program is working because if I’m not there to walk with them and they’re taking the initiative to walk without their peer lead...there’s something happening.”</p> | <p>“It encourages you more because you kind of don’t want to let down the group so you think oh everybody else is going to be there so I’ll be there too.”</p> | <p>“...the other thing is outside of the (centre), ... in the (community) walking group that happens, I’m part of that family now too”</p> |
| | <p>“[yoga] teach[es] acceptance of yourself...it’s...just acknowledging where you are, rather than striving for something or comparing to someone else”.</p> | <p>“Walking in a group, you have the support and strength from your peers rather than being intimidated or anxious with strangers on the street.”</p> | <p>“I’ve seen (the YMCA instructors) out in the community and we’ve had conversations, like we’re friends...that really makes a difference.”</p> |
| | <p>“I’m always afraid everybody’s staring at me...[the walking program] made a huge difference because of this I’m now doing more and I’m feeling better about it”.</p> | <p>“it was quite frustrating when different things happened, conflict in the room, that I didn’t have any guidance at all. I was floundering”.</p> | <p>“I know most of the researchers by name and we’re able to, even outside of the walls of the centre, on the street say hi to each other and that’s a real human connection.”</p> |

Discussion

First reported evaluation of peer-developed, peer-led PA programs

Peer Lead coaching & leadership skills development are required

Theory of Engagement & Change

1. Engagement resides in accessibility

**First study to identify geographical
accessibility/psychosocial belonging as part of
engagement**

2. Behaviour change resides in co-constituent
relationships

Other considerations

Dropout a challenge – need *forgiving flexibility*

Role of **self-determination & empowerment**

Limitations

- Selection bias
- Economic incentives

Conclusion

Feasibility & acceptability

Integration of concepts of accessibility & relationships

Replication needed

Acknowledgements

Project Lead: Dr. Candida Graham, Northern Medical Program, UNBC; Medical Lead, MH & A; NH

Project Lead & ACE Centre Coordinator: Nansi Long

Co-Investigator: Dr. Brenda Griffiths

Collaborators: Dr. Sarah de Leeuw, Lesley Anderson, Lynn Smoliak, Dr. Megan Davies, Dr. Diane Purvey

Research Personnel: Stephanie Powell-Hellyer, Crystal Rollings

Undergraduate Trainee: Sabrina Trigo

Postgraduate Trainees/Study Personnel

Mandeep Bhatti, M.D.

Christina Boucher, M.D.

Michelle Fancy, M.D.

Alice Graham, M.D.

Gurnaam Kasbia, M.D.

Roseann Larstone, Ph.D.

Eric Paulson, M.D.

This research was supported by grant number UNR12-0791 from the Vancouver Foundation to Dr. Graham.



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