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Title: Addressing financial strain through a peer-to-peer intervention in primary care

Running head: Peer-to-peer financial empowerment in primary care

Article category: Qualitative research

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Key messages

1) A peer-to-peer intervention focused on financial empowerment was successful.
2) Situating this intervention in healthcare meant it was viewed as trustworthy.
3) Future social determinants interventions could use a peer-to-peer format.

Abstract

Background

Financial strain is a key social determinant of health. As primary care organizations begin to explore ways to address social determinants, peer-to-peer interventions hold promise.

Objective

Our objective was to evaluate a peer-to-peer intervention focused on financial empowerment delivered in primary care, in partnership with a social enterprise.

Methods

This intervention was hosted by a large primary care organization in Toronto, Canada. Participants were recruited within the organization and from local services. We organized three separate groups who met over 10 weekly in-person, facilitated sessions: millennials (age 19-29) no longer in school, precariously employed adults (age 30-55), and older adults near retirement (age 55-64). We applied principles of adult education and peer-to-peer learning. We administered surveys at intake, at exit, and at three months after the intervention, and conducted three focus groups.

Results

59 people took part. At three months, participants had sustained higher rates of optimism about their financial situation (54% improved from baseline), their degree of control (55% improved) and stress around finances (50% improved). In focus groups, participants reported greater understanding of their finances, that they were not alone in struggling with finances, and that it was useful to meet with others. One group continued to meet for several months after the intervention.

Conclusion

In this study, a peer-to-peer intervention helped address a key social determinant of health, likely through reducing stigma, providing group support, and creating a space to discuss solutions. Primary care can host these interventions, and help engage potential participants.

Key words:

Primary care

Health disparities

Underserved populations (e.g., Uninsured, Minorities)

Health promotion

At-risk groups

Community medicine

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Background

The conditions in which people are born, live, work and age – and the political processes and distribution of money, power and resources that sustain these conditions – are the social determinants of health (SDoH).[1] These include a person's income, employment status, housing conditions, and legal status, as well as the characteristics of their neighbourhood and broader community. There has been renewed interest in engaging health organizations in addressing SDoH, driven by a growing recognition that such factors drive health service use, can be a key part of patient-centred care, and that effective interventions are beginning to emerge.[2–5] Medical associations, including the British Medical Association[6], the Canadian Medical Association[7], the College of Family Physicians of Canada[8], and the American Academy of Pediatrics[9] have all encouraged members to take action on SDoH.

Our financial status is a key determinant of our health, encompassing our income, our wealth, our expenses, and our financially literacy.[10] It has long been recognized that wealthier people are healthier than poorer people.[11] Financial status influences a person's ability to purchase key material goods necessary for their health (e.g. safe housing, nutritious food), their ability to deal with crises, and also influences their social status and social connectedness.[12] Financial strain, or chronically being unable to pay for basic necessitates, appears to affect our health through a complex stress response.[13] Financial strain intersects with and reinforces other forms of disadvantage, such as racial discrimination.[14] Low income has cascading negative impacts on other social determinants of health including food security, housing, social status and access to health care and social services.[17] Improving financial literacy could offer a partial solution to income insecurity, and has been more strongly correlated with wealth accumulation than educational attainment.[15,16] Interventions that improve financial literacy may mitigate harms of living on a low income for individual participants.

Primary care organizations have potential to intervene on financial literacy, as they are a trusted source of information, have longitudinal relationships with patients, and take a holistic view of health to include social factors.[18,19] Existing interventions to address financial strain within primary health care have focused on helping patients obtain new financial benefits, often through assisting patients navigate

complex social care systems or insurance programs.[20,21] Such interventions usually do not involve peer-to-peer approaches. Peer-to-peer interventions are those that are facilitated and monitored by trained or instructed peers as opposed to a formal instructor.[22] Peer-to-peer interventions help participants see what is possible and build problem-solving capacity. They allow individuals to learn from others' experience and help to reduce the stigma of discussing financial challenges among participants. Peer-to-peer interventions have been successfully used to address a variety of health issues, including smoking cessation[23–25], substance misuse[26,27], and unsafe sexual behavior.[28] Peer-led breastfeeding counseling is more efficacious than formal education interventions at initiating breastfeeding behavior and increases breastfeeding duration.[29] Peer-to-peer telephone calls are effective at increasing mammography screenings among women and in changing dietary habits among post-myocardial infarction patients than traditional education interventions.[30]

Given the potential of peer-to-peer interventions, our objective was to evaluate the acceptability, feasibility and short-term impact of a peer-to-peer intervention around financial literacy, organized through primary health care.

Methods

This project was approved by the St. Michael's Hospital Research Ethics Board and the University of Toronto Research Ethics Board.

The setting for this study was the St. Michael's Hospital Academic Family Health Team, a large patient-centred medical home for over 45,000 rostered patients served at six clinic sites in south-east Toronto, Canada. Staff include 75 family physicians and over 70 allied health care professionals, including nurses, nurse practitioners, social workers, dieticians, addiction counsellors, pharmacists, and psychologists. The Family Health Team has a history of working to address the social determinants of health[31], including an income security health promotion service[32] and a medical-legal partnership.[33]

Participants for this study were recruited through posters and flyers distributed within the Family Health Team and through other health and social service organizations in south-east Toronto. The inclusion criteria were that participants must live in Toronto and could anticipate attending all sessions, were age 19-64 years old and could converse in English. Exclusion criteria were being unable to work or attend school for more than 1 year due to a health concern, receiving welfare (Ontario Works) or disability support payments from the government (Ontario Disability Support Program), dealing with an acute financial crisis or emergency (e.g. facing eviction), or being a patient of a member of the study team.

We brought together three groups of patients weekly for in-person sessions lasting two hours each for 10 consecutive weeks. Participants were grouped into 1) millennials (age 19-29) who are no longer in school, 2) adults who self-identify as precariously employed (age 30-55) and 3) older adults nearing retirement (age 55-64). These three groups were chosen due to their unique contexts, and so participants could relate to each other within their stage of life. A trained facilitator guided each group through a curriculum designed to address enablers of financial success: 1) having personal goals and using them as a guide to decision making; 2) understanding personal finance, how it works and how it is used by others; 3) Having an ability to problem solve through individual challenges; 4) establishing an openness to collaborate with others; and 5) making a commitment to ongoing financial management and learning. The 10 sessions covered a range of subjects, including budgeting, credit basics, understanding risks and building resiliency, and strategies to increase income [Table 1].

Participants were encouraged to set goals, and weekly sessions provided space for everyone to report back on their progress, successes and challenges. Small financial prizes (three $10 prizes at each session) were used to encourage behaviour change that aligned with the objectives of the session. The prize winners were selected by the group using the collective goal of "rewarding someone who has worked hard on advancing the goals that they set the previous week". For example, these included taking steps to deal with debt or establish a savings plan. Light refreshments were provided at all sessions, but participants were not paid to attend (Appendix 1).

We administered a brief demographic survey to individuals at the initial session that collected information on age, sex, educational attainment, immigration status, employment status, income and financial behaviors. At the first and final session we administered intake and exit surveys, using items from the Canadian Financial Literacy Quiz[34], the only measure of financial literacy that has been developed in Canada to date. We also contacted participants at 1 month and 3 months after the last session via telephone, and a trained research assistant administered a brief survey that included open-ended questions to collect data on the short-term impact of the intervention.

Focus groups were conducted with each of the cohorts (three in total) by members of the study team (MB, ACN), and all participants were invited to take part. These focus groups occurred after the sessions ended to explore participant experiences of the intervention and what facilitated or impeded changes in behaviour. Focus groups were audio-recorded and transcribed by a professional transcription company, and the transcripts were analyzed using NVivo 10 (QSR International, Victoria, Australia). We applied a thematic content analysis to code and interpret these transcripts.[35] A sub-group of investigators (AP, ACN, MDP) developed an initial coding framework based on our research question and initial theory of how the program worked. Study team members then all read one randomly selected transcript and applied the coding framework, then met in person and via teleconference to discuss and refine the coding scheme. This revised coding scheme was applied by one team member (ACN) to the remaining two transcripts. The final set of key themes was identified using NVivo software and discussed as a group to confirm agreement and to assess whether saturation was reached in terms of understanding the acceptability and feasibility of this intervention, and its short-term impact.

Results

Of the 59 individuals taking part in the peer-to-peer sessions, 34 agreed to participate in the surveys for the research study. The small number of respondents in each of the three cohorts precluded examining differences between these groups, so all results are pooled. 27 (79%) identified as female and 7 (21%) identified as male. Their median age was 41 (range 22-65). 28 (41%) were immigrants to Canada, and of

these, 3 (21%) had immigrated in the last five years. The majority (82%) had some university of college training or had completed a university or college degree. Although 23 (68%) were working either part-time or full-time, 19 (56%) reported that their family was living on an income below the low-income cut-off for 2017, meaning that they spent 20% or more of their income than the average family on the necessities of food, shelter and clothing. 2 (6%) were homeless at the beginning of the study. 32 (94%) had a bank account, 27 (79%) reported usually filing their taxes, and 29 (85%) had filed taxes in the last year.

Our study was not powered to detect significant changes in specific outcomes, but the results from the pre/post surveys provide some useful information on how the financial capabilities of the participants changed over time. At the end of the intervention, we were able to survey 27 (79%) participants. 74% reported a higher level of optimism about their financial situation than compared to baseline. Similarly, 78% reported having a higher degree of control over their financial situation than at baseline, and 63% reported having lower levels of stress related to finances. 37% reported an improvement in making ends meet, 46% reported no change, and 16% were more likely to have difficulty making ends meet. 26% reported an improvement in keeping track of money, 26% reported having more difficulty keeping track of money, and 48% reported no change. 44% reported an improvement in staying informed about their finances, 54% experienced no change, and 0% of participants worsened in this regard. At 3 months, we were able to reach 22 (65%) participants via telephone. The positive impact of the intervention appeared to be sustained. Rates of optimism about their financial situation (54% improved from baseline), degree of control over their financial situation (55% improved from baseline), and stress around finances (50% improved from baseline) was very similar to scores at the end of the intervention.

Three separate focus groups included 22 participants in total, and each lasted for approximately 60 minutes. Participants found the intervention useful and were satisfied with the curriculum, the setting, and the facilitator, suggesting it is acceptable and feasible in primary care. Many had entered into the program with low expectations that were exceeded, and people felt hopeful in the end. One participant noted that, *"I was just hoping to refresh myself on things that I thought I knew about finances. But it just blew me out of the water with what I found out".* Another participant stated that, *"the feeling after the sessions is like*

hope." The peer-to-peer aspect of this intervention worked well, particularly understanding that participants were not alone in their challenges. One participant noted that, *"we are getting some kind of strength from each other."* The program provided participants with a supportive environment and emotional support to overcome their financial issues. They were also able to learn from other's past experiences which one person described as, *"I'm listening to everybody's experiences and [incorporating] them,"* while another mentioned, *"everyone seems to have a small piece of the puzzle."* The group environment also created accountability for participants to complete weekly goals. One participant noted that *"the goal setting is really important and through that accountability of having to come and say what you've done is really good for me."* The only negative comments regarding the peer-to-peer group format involved people talking too much or going off on tangents.

Many participants were initially surprised that a financial program was offered in a health care setting with one noting that, *"I was surprised because usually you think the hospital and it's clinics are going to take care of certain aspects of your health…but I never thought it would extend to finances, which is a great thing for a lot of us."* The participants were pleased it was in a healthcare setting as they felt that it provided them with a reliable, professional and trustworthy source of information in comparison to traditional financial settings. One stated that, *"in a bank or a financial setting, we may have thought you guys were trying to get something out of us…but here, you guys weren't doing that. You were just trying to teach us. You're helping us."* By the end of the program, some participants described that they were now able to better see the connection between their health and their financial situation.

The main impact on health was a decrease in short-term anxiety and stress, and improvements in mood and in social connections. One participant noted, *"I walked in here defeated, walking out whole"* while another said, *"I honestly felt like this weight had been lifted off my shoulder…it's a journey and sometimes an uphill battle. And we are all trying to get there."* One participant described the health benefit of the peer environment as a *"support from being isolated and new friendships. So, that's a big way towards my psychological wellness."*

Many participants learned something new through the intervention, and emerged feeling that their financial difficulties were more manageable. Numerous examples of knowledge, behavioural, and financial outcomes of the program were identified by participants [Table 2].

The main improvement suggested by the group was to extend the time the groups could meet, as many issues required more than 10 weeks to identify, understand and address. One participant noted that *"growth is continuous learning…it's like story-telling, you know. You have the beginning, the middle and end, to flush out. This feels like the beginning. And, now I want to know what the middle is. And, then I want to know what the end is. It's got me curious, which is what it did for me."*

Conclusion

We found that patients dealing with financial security challenges, particularly issues around financial literacy, benefited from a peer-to-peer intervention. Based on participant reflections, some key aspects of its success appear to have been 1) a focus on the enablers of financial success which are core life skills and different from traditional financial literacy focus areas, 2) having an ecosystem to encourage personal momentum via efforts to create a personal plan, set and share weekly goals, access peer support, and have the opportunity to receive prizes that recognize individual effort as well as, 3) having a skilled facilitator set the stage and manage the groups in order to create a safe space for participants to learn and share, and working with peers who were facing similar challenges. Self-reported measures suggest that participants emerged more optimistic about their finances, with a greater sense of control and less stress around finances. This intervention was well received by participants, in part because it was delivered in a familiar health care setting, although it was not fully integrated into clinical care (i.e. no personal health information was circulated between the facilitator and the health team, and participants self-identified as interested in the intervention and were not referred).

Our findings add to the existing literature on interventions in primary health care to address financial concerns as a key social determinant of health. In Canada, providing patients with information on financial

benefits for which they are eligible has been proven to be acceptable and feasible[36], as has an intervention with full-time staff focused on assisting patients with financial strain.[37] Several American studies have examined the impact of routinely screening patients for a variety of social needs, including financial strain, and offering written information and system navigation to connect to community resources.[38,39] In the United Kingdom, several studies have also described bringing Citizen Advice Bureau services into general practices, leading to improvements in financial security and quality of life.[19,40]

Our study was limited by the relatively small number of individuals who engaged in the intervention, who consented to take part in the study, and who could be reached for follow-up. In addition, no comparison or control group was available. Future efforts to evaluate the impact of this intervention could involve sufficient numbers to estimate the impact on financial literacy and financial outcomes over a longer period of time. The results are also likely limited due to social desirability bias and selection bias.

This project provides evidence of the potential value of peer-to-peer interventions to tackle key social needs, including inadequate income. In this intervention, learning that peers were facing similar challenges seemed particularly important. Further, seeing examples of how people overcame challenges was reported as inspiring, and motivated some participants to move from inaction to action. This suggests that participants not only learned new information about how to address financial issues (e.g. how to apply for benefits, how to budget) but also developed self-efficacy through learning from others. Future interventions that address social determinants of health could be centred on peer-to-peer work, e.g. interventions on improving housing conditions, addressing issues around legal status and immigration, or precarious employment.

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Conflict of interest: Monica Da Ponte is the founder and director of Strive, the social enterprise within which this peer-to-peer financial empowerment intervention has been developed.

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Table 1: Curriculum of peer-to-peer financial empowerment intervention

Week	Content Focus Areas	
	Enablers of personal financial success	**"How it works" knowledge**
1	Knowing what you want; establishing your personal vision & goals	
2	Understanding the financial landscape	Credit Basics & selecting products & services that are right for you
3	Enabling ongoing management & learning	Budgeting & keeping track of your money to meet your goals
4	Building a plan to get to your goals	Taxes, benefit opportunities & how to access them
5	Success; a delayed result of earlier investments	Strategies to increase your income today and tomorrow
6	Problem solving your way towards success	Savings and using debt to help you, not hold you back
7	Understanding risks & building your resiliency	Rainy day funds & insurance
8	Building openness and collaborating with others	Advocating for yourself and being your own best champion
9	Building an ecosystem around yourself for success	Understanding and leveraging what you have access to
10	Enjoying today while working towards tomorrow	Evaluating return on your time and money investments

Table 2: Examples provided by participants of changes in knowledge, behavior and financial situation.

Knowledge	Behaviour	Financial Situation
• Community resources (i.e. access to free computers, printers, faxes) • Consolidating debt • Credit cards and rates • Grants and other sources of income • Credit scores • CPP • "I think that the main thing is we have a lot of knowledge and a lot of learning…coping mechanisms and websites and really good material that we have to take home now and go back and look on."	• Participates in free activities (i.e hiking with friends, swimming, walking in the park) • Replaced car with other modes of transportation (i.e. TTC) • Stopped buying Tim Hortons coffee • Can now talk themselves out of buying things that they don't need • Leaves credit cards at home and removed apple pay from phone to avoid unnecessary spending • Limited to having only one credit card • Weekly personal check-ins about finances • Lowered credit card interest rate	• Got a part time job • Participates in paid focus groups to generate some extra income • Started working temp/one day jobs • Rented out extra room • Applied for grants • Working with other financial services to file taxes • Consolidated debt • Had some fees waived with cell phone company • Switched to a bank account with no fees • Advocated for a free eye exam when getting new glasses

	• Move debt onto a line of credit • Starting going to school	