

ORIGINAL ARTICLE

Evaluation of a peer-led self-management education programme PEP Talk: Diabetes, Healthy Feet and You

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Abstract

PEP (Peer Education Programme) Talk: Diabetes, Healthy Feet and You is a peer-led self-management programme developed to address the problems of growing prevalence of diabetes and its complications, and limited health care dollars. An evaluation of the programme, how it might be situated within a public health perspective and potential bridges for its implementation in communities throughout Canada and worldwide, are presented. The programme consisted of workshops that were conducted by volunteer peer leaders and health care professionals in 12 communities in 10 Canadian provinces; the volunteers were supported through monthly mentoring teleconferences, on-line tips and discussion board conversations. A web portal was developed to be used by the team, volunteers and community participants. Workshop curriculum was developed based on diabetes footcare and self-management best practise guidelines. Community participants answered pre-and post-workshop statements that indicated that learning occurred, as indicated by an increase in the number of statements answered correctly. Participants' feedback about the workshops was positive. In telephone follow-up interviews, 97% of respondents reported having changed their foot self-management behaviours. The portal was commonly used according to website visits, but not as much as expected for registration of community participants. It is recommended that this programme be made widely available and tailored to the specific needs of the communities and that further evaluation be conducted.

Introduction

In Canada, there are 2.7 million people with diabetes (95% have type 2) and this number is expected to rise to 4.2 million by 2020 (1–3). The Canadian Association of Wound Care reports that approximately 15% of those with diabetes will develop a diabetic foot ulcer during their life (4). The estimated annual cost of diabetic foot ulcers to the Canadian health care system is more than \$150 million (1). A frequent complication of non-healing diabetic foot ulcers is amputation of the foot or leg. It is estimated that 85% of all leg amputations are a result of non-healing foot ulcers (4).

Key Messages

- the PEP Talk: Diabetes, Healthy Feet and You programme demonstrated promising results in increasing knowledge and stimulating behavioural change
- good understanding of the specific needs of a community is essential
- further programme evaluation is required to determine its impact on foot complications, quality of life and cost-effectiveness
- successful peer-led self-management programmes depend on the commitment of organisations to deliver

self-management programmes, commitment of peer leaders and volunteers

- health care professionals need to recognise the valuable role of peer-led educational programmes and how peer-led programmes complement their care for people with diabetes

One of the many challenges faced by people who have diabetes is initiating and maintaining proper, safe footcare in order to prevent foot ulcers (5). It is estimated that prevention in the form of foot and nail care and appropriate footwear would eliminate more than half of the complications (4). People with diabetes need to learn about their disease and ways in which they can participate in the prevention of complications.

Self-management educational models are being used to educate people who have diabetes or other chronic diseases to increase individuals' self-confidence and foster their motivation to become an advocate and expert in the management of their own health and wellness (6,7). Self-management interventions have been found to be more effective than standard care for increasing knowledge, self-care behaviours, self-efficacy and clinical outcomes (6). Involving lay peer educators in the delivery of self-management educational programmes has been recognised to enrich the delivery and depth of the self-management education by the sharing of the peer educators' own experiences and commitment to change. Ongoing support is needed to sustain changes made as a result of the educational process and peers have had a significant impact in this area.

Peer support among people with the same chronic health problem may be especially effective, combining the benefits of both receiving and providing social support. Peer education has been shown to be beneficial for improving self-management of migraine, leg ulcers and mental illness (8–11). Recent evidence from a systematic review with meta-analysis based on 13 trials involving 3063 community participants illustrated that self-management has short-term and long-term effects on pain and disability in people with non-specific low back pain (12).

Self-management is especially important for preventing diabetic complications (13,14). Evidence from randomised controlled trials and systematic reviews evaluating peer-led face-to-face self-management programmes has demonstrated that participants experienced improved glycaemic control, quality of life, self-efficacy and other patient-centred outcomes (15,16).

Currently, there is global interest in evaluating peer-led self-management programmes for people with diabetes (17). For example, to improve health and address challenges to the health care system in Shanghai, China, Shen *et al.* have developed a study protocol for a new peer-led self-management programme for older community-dwelling people with diabetes (18). Using a quasi-experimental study design and cluster randomisation of communities, their project will involve experimental and control group subjects recruited from two

different communities to determine effectiveness and feasibility of the peer-led self-management programme.

Patient education directed towards raising awareness and teaching people with diabetes about looking after their feet has an effect on their footcare knowledge and actions in the short-term (19). The studies in this systematic review were of insufficient duration to provide evidence that education alone affected the occurrence of ulcers and amputations (19). Norris *et al.* suggested that diabetes self-care might be improved by educational interventions that involved patient collaboration and this suggestion has been incorporated into the development of the peer-led self-management programme (16).

Recognising the potential strength of peer-led self-management model, the Canadian Association of Wound Care and Public Health Agency of Canada collaborated to develop and deliver the PEP Talk: Diabetes, Healthy Feet and You programme.

Purposes

The purposes of this article are to present the results of the evaluation of the PEP Talk: Diabetes, Healthy Feet and You programme and to discuss how the programme might be situated within the public health perspective.

PEP Talk: Diabetes, Healthy Feet and You is a Canadian peer-led self-management education programme designed to help people with diabetes to self-manage their feet and, thereby, prevent diabetic foot ulcers and amputations. The programme that started in 2012 is based on the Chronic Care Management Model that has been discussed previously in relation to this programme (20).

A network of volunteer peer educators working in partnership with community diabetes health care professionals was created to conduct self-management educational workshops to empower people living with diabetes to adopt self-management behaviours that can help them to prevent diabetic foot ulcers by increasing their knowledge of risk factors and linking them to resources in the diabetes community. The PEP Talk programme is unique in that the education component is peer led and there is an establishment of linkages to the diabetes community. It is the first peer-led diabetic footcare programme that focuses on preventing foot ulcers.

A programme was conducted to determine the feasibility of:

- Recruiting volunteers to participate – peer leaders and health care professionals
- Conducting the programme in communities across Canada
- Developing a network of leaders
- Maintaining support for the leaders
- Developing a web portal
- Evaluating programme processes and outcomes
- Revising the programme to improve delivery
- Developing strategies for sustaining the programme

The PEP Talk programme was based on the following assumptions:

- Educating people with diabetes about footcare and linking them to their diabetes community will help to reduce the occurrence of foot ulcers and amputations.
- People with diabetes will relate to peers because of their experience living with diabetes and its related complications.
- Peer educators will assist people with diabetes in navigating the health care system and will share their experiences and provide support.
- Support and mentoring by health care professionals will further reinforce awareness and behavioural changes.

Methods

Description of the programme

Recruitment

Volunteers were recruited, that is, two peer leaders and two health care professionals from 12 sites in 10 provinces across Canada; two sites focused on Aboriginal communities. Health care professionals were recruited through people known to the PEP Talk team members and the members of the Expert Advisory Group. The commitment to conduct monthly workshops was so burdensome that some potential recruits declined. It took approximately 6 months to locate and recruit all volunteers. One of the challenges was to overcome resistance and get endorsement from the health care professionals to endorse the peer leaders who would conduct education sessions and collaborate with community participants; the need for collaboration has been recognised in self-management guidelines (21).

Peer leader reason for participating in program: "I decided to get involved because I thought that if my involvement might help someone else avoid an amputation, then I would be a more than willing volunteer."

Curriculum development

The curriculum was developed by the clinical experts on the PEP Talk team based on recommendations in the literature and also national and international best practise guidelines for preventing complications, managing diabetic feet and self-management guidelines (22–25) and after examining other successful peer-led models, including the Stanford Chronic Disease Self-Management model (26) and the volunteer peer educator role in a Community Cardiovascular Health Awareness Program (CHAP) model (27). The Expert Advisory Group and a Patient Focus Group provided feedback about the proposed curriculum and workshop materials for the training event for health care professionals and peer leaders and this was incorporated into changes.

Training event for peer leaders and health care professionals

The training event was held over 2 days at the beginning of April 2012. The peer leaders and health care professionals

were taught to plan and implement a 2.5-hour PEP peer-led workshop in their own community using adult education principles; to develop an individualised plan for their community with mentoring and support from the PEP Talk team; to create a safe learning environment for the participants; to feel confident to handle issues that arise in a group learning situation; to have an awareness of other community and PEP Talk team resources and where to find help; to understand the concept of self-efficacy and the strategies to enhance self-efficacy; and to increase the participants confidence to perform footcare assessments.

Web portal

The web portal was developed for communication and support. For example, resources and forms were available, and there was a site for the leaders in each community to post details about planned workshops, community resources, and for community participants to register. There was also a discussion board on which leaders could post questions or comments for discussion.

Mentoring

Peer leaders and health care professionals were supported and mentored throughout the programme through emails, monthly conference calls and on-line tips. In addition, when the need arose, members of the PEP Talk team made site visits.

Community workshops

The workshop content, although tailored by the leaders, included the following key components: Peer leader sharing his or her personal journey of living with neuropathy and foot complications (15 minutes); round table introductions as ice-breakers (15 minutes); Diabetes, Healthy Feet and You PowerPoint slides with information about caring for feet and reasons why this is important (30 minutes); the diabetic foot exam video followed by participants performing a foot self-exam (15 minutes); description of a case study and discussion (20 minutes); video entitled Caring for Your Feet (10 minutes); group discussion about commitment to change and potential facilitators and barriers to change (30 minutes). There was discussion designed to empower participants to take charge of their own health, to perform self-care, to recognise risks, and to develop strategies to avoid them.

Data Collection

Ethics approval

The Research Ethics Board of the Western University, London, Ontario, Canada approved this project.

Workshop evaluations

All community participants were asked to complete pre-workshop and post-workshop forms to determine the extent to which participants increased their knowledge and felt empowered to manage their disease, information about the participants and satisfaction with the workshop.

Pre- and post-workshop knowledge statements

The statements were developed to determine if knowledge was gained from the pretest, at the beginning of the workshop, until immediately at the end of the workshop. For the posttest, the order of the statements was different from the pretest in an effort to avoid participants recalling their previous scoring. The statements were pretested by the patient focus group as part of pilot testing the curriculum in December 2011. Minor adjustments were made and the statements were used for the individual workshop evaluations.

It was anticipated that scores would increase, indicating that knowledge was gained. For the pre- and post-workshop questionnaires, the correct answers were counted to derive a score out of ten. This analysis includes the data from all participants who filled out any of the statements. Unfortunately, some participants completed only the pre-workshop form and some only the post-workshop form and this made it difficult to compare scores within individuals for the whole group ($n = 266$ pre, $n = 267$ post).

Self-management behavioural change and foot complications

In an effort to determine if the PEP Talk programme had an impact on behaviour, changes in self-management practises and newly developed foot changes were evaluated.

Collecting data to determine if the self-management behaviours of community participants changed after the community workshops was challenging for several reasons. Follow-up was not part of the PEP Talk programme; community participants attended one workshop only. The peer leaders and health care professionals told community participants that they could access and complete a form about changes on the portal, but none did so. In addition, many community participants were not computer savvy; they did not look for or find the changes form on the portal.

Data were collected in two ways. First, some health care professionals collected Changes Form data from participants they knew had been to a workshop when they met them again for other reasons related to their care ($n = 16$). Second, some health care professionals and peer leaders sent in a list of the workshop attendees for their sessions. Towards the end of the project, efforts were made to reach by telephone the 33 attendees who were on the lists. Through telephone interviews 14 respondents completed the form. This method of collecting data by interview was very labour-intensive but provided good-quality information. The total number of people who provided data about self-management behavioural change and foot complications by paper or interview was 30 (Table 1).

Those who could be followed up and who were eligible to participate were the 30 who participated plus the 3 who refused to participate, or in all 33.

Results

All sites workshops evaluation results

There were 62 workshops conducted from April 2012 to March 2013. The following evaluation results are based on

Table 1 Behavioural change and foot complications data numbers

Number of community participants involved in follow-up	
Potential number who could participate in follow-up, that is, people who completed forms or who were on attendee lists	50
Number ineligible	17
Unable to make contact	13
Family member of person with diabetes	2
Nurses seeking knowledge	2
Number eligible to provide follow-up information	33
Number contacted who refused to participate in interview	3
Number who completed paper forms	16
Number who participated in telephonic interviews	14
Total number of respondents	30

combined participant feedback from all sites that submitted evaluation forms to date, that is, 45 sites. Two hundred ninety-four community participants participated in these 45 workshops.

Not all participants had diabetes; spouses and caregivers attended some workshops. As the programme became more well-known, health care professionals and student health care professionals who wanted to be better informed also attended. It was thought to be important to disseminate the programme and its content as widely as possible for the benefit of people with diabetes. As a result, about half the community participants were people with diabetes.

Pre- and post-workshop statements

The same 10 statements were to be judged true or false pre- and post-workshop. The total number of participants was 294. The number of participants who provided responses for these statements were 266 and 267 for the pre- and post-workshop assessments, respectively. It is not known why the other participants did not answer the pre- and post-workshop questions.

Some respondents had a pre-existing high level of knowledge and others did not. Overall, however, from pre- to post-workshop, participants' average correct number of responses score on the statements increased from 7.6 to 8.4 (out of 10).

The following two of the statements addressed information that respondents already knew well. The percentages of respondents with correct answers pre-workshop were high, 96% and 97%, respectively, leaving little room for improvement in posttest scores. The questions that had high pretest scores and did not change were:

- Poor diabetes control can result in reduced blood flow to your feet (96%).
- Diabetes can lead to damage of nerves that can reduce sensation in your feet (97%).

The following statements indicate that there was room for improvement in specific self-management strategies, as well as recognition of early symptoms and signs of foot ulcers. Some of these statements had quite high pretest scores and changed positively, while others changed a great deal (percentages of correct responses pre- and post-workshop):

- The health of your feet has no connection with blood sugar levels (80–85%).
- A foot examination by your health care professional is important only if you have a foot problem (84–86%).
- Poor nail care can lead to the development of diabetic foot ulcers (89–94%).
- When you cannot feel your feet, you can protect your feet at home by wearing socks only (80–90%).
- One thing that can lead to diabetic foot ulcers is bony changes in feet (70–89%).
- Soaking your feet keeps them healthy (58–87%).

The scores for the following two statements indicate no knowledge gained about these topics:

- The foot doctor is the most important person in your health team (55–50%). The responses to this question indicate that participants are aware of the importance of the foot doctor, but they need to realise the importance of their own role in the team.
- If your feet are changing shape, the first thing to do is to buy new shoes (64–63%). As with the previous statement, participants know that they need new shoes when their feet are changing shape, but this is not the first thing to do.

Information about participants

Average duration since diagnosis of diabetes, based on the 155 respondents who completed this item, was 14.4 (SD 12) years, with a range from 0.1 to 63 years. Of the 248 respondents who indicated their sex, 62% were female and 38% male.

Participants indicated their self-management goals. Most of the participants indicated that they intended to check their feet (93%) and their blood sugar (90%). The majority indicated that they would wear shoes inside and outside the house (74%), buy new walking shoes (71%), ask about the findings of their foot assessment (70%) and sensation testing (69%), take off socks and shoes when visiting the health professional (64%) and take a list of questions (64%). Fewer participants indicated that they would take a friend or family member to the HCP visit (38%). Only 56% indicated that they would attend the clinic regularly for screening, suggesting the importance of learning to self-manage their feet.

Diabetes Empowerment Questions indicate the extent to which the participants feel they are able to self-manage their diabetes. Responses were 'strongly disagree' (1) to 'strongly agree' (5). The average scores (out of 5) are reported. All average scores are close to 4 indicating that the participants feel empowered to self-manage their disease, as illustrated in Table 2.

Feedback about the workshop

Participants were asked to rate the workshop components on a scale out of 5. Workshop components were: content of the workshop workbook, effectiveness of the interactive components of training, organisational skills and overall knowledge of the presenters, overall content of the presentations, quality of audiovisual presentations, event organisation and event

Table 2 Diabetes empowerment

In general, I believe that I:	Average (number of respondents)
1. ... know what part(s) of taking care of my diabetes that I am <i>dissatisfied</i> with.	3.8 (<i>n</i> = 202)
2. ... am able to turn my diabetes goals into a workable plan.	4.2 (<i>n</i> = 208)
3. ... can try out different ways of overcoming barriers to my diabetes goals.	4.2 (<i>n</i> = 207)
4. ... can find ways to feel better about <i>having</i> diabetes.	4.1 (<i>n</i> = 204)
5. ... know the <i>positive</i> ways I cope with diabetes-related stress.	4.1 (<i>n</i> = 204)
6. ... can ask for support for having and caring for my diabetes when I need it.	4.3 (<i>n</i> = 204)
7. ... know what helps me stay motivated to care for my diabetes.	4.2 (<i>n</i> = 205)
8. ... know enough about myself as a person to make diabetes care choices that are right for me.	4.3 (<i>n</i> = 206)

location/environment. All components were rated quite highly with average scores ranging from 4.4 to 4.7. The high scores for this part of the evaluation indicate that participants were satisfied with the workshops.

Participants' opinions about the workshops were sought without a checklist (open-ended) until part way through the evaluation. This affected the percentages, as not all participants created their own responses. Participants' appreciated hearing the shared stories (76%) told by the peer leaders in a friendly environment (91%). They found the overall experience informative (85%); the details about specific footcare informative (79%); and the leaders knowledgeable (80%) and able to answer their questions (70%). A few participants indicated that they learned about themselves (47%) and some were grateful for learning about resources in their own communities (46%). A few people did not specify details but indicated they liked everything (54%).

The workshop was very informative. As a diabetic I was told to watch my feet but I didn't know what to watch for until I attended this workshop. Now knowing what to watch for really makes me aware of how serious this can be to my health regarding amputation.

Follow-up evaluation

On the basis of the potential number of people who could be followed up and who were eligible, the response rate was (30/33) 91%. However, based on the number of people with diabetes who attended the workshops, that is, half the total number of participants who completed some parts of the evaluation (294/2), the response rate was (30/147) 20%.

Community participants' self-management changes – the goal is to observe positive change

Ninety-seven percentage of the 30 respondents indicated making specific self-management changes. The number of

self-management changes reported by each respondent was counted. The mean number of reported changes was six (SD 3).

Respondents were asked the specific areas of change that they had made. For some people no change was required because they were already practising good risk management.

The majority of respondents reported having made self-management changes particularly in relation to controlling blood sugar (73%), checking their feet more often (63%), and wearing shoes in the house (80%). The respondents' specific comments regarding checking their feet, controlling their blood sugar, asking for sensation testing results and wearing shoes inside the house indicate that many understood the risks to their feet. There was some discrepancy about reporting if they were finding out the results of their foot examinations and taking off their socks at the doctors' office, but about half the respondents reported awareness of the importance of these (50% and 53%, respectively). Lower percentages were observed for more regular attendance at clinics for screening (37%), taking a list of questions to ask the health care professional (37%), and taking a friend or family member along to appointments with their health care professional.

Newly developed foot changes – the goal is to observe few of these changes

There were very few new foot changes. The most serious foot change was that one person developed an ulcer and required surgery to close it; this person attended a PEP Talk workshop in May 2012 and the ulcer developed in November. There were no amputations. Several people developed calluses and toes that cross the adjacent one.

Portal

The web developer for the site (portal <http://diabetespeptalk.ca/>) reported the visitor statistics for the Portal: Diabetes, Healthy Feet and You and Diabetes PEPtalk.ca. The date range was from the time the site was developed, 14 April 2012, until the official end of the programme, 31 March 2013. Page views ('visits'): 54,559; and unique page views ('visitors'): 36,703.

The majority of peer leaders and health care professionals indicated that the portal was used for support and to submit reports. In addition, it was used to verify the accuracy of our workshop details, to check other provinces' scheduled workshops, to check the discussion board, to complete the evaluation forms, to contact other members of the team, to list community resources, to find information, to advertise local resources, to register clients and to show clients the website available for them.

Discussion

The results provide some evidence of participant awareness of potential foot complications and adoption of self-management practises. Participants responded favourably about the content and presentations at the workshops. Peer leaders and health

care professionals displayed dedication to the programme and volunteered a great deal of time and effort over the year. The portal was used well by the leaders to publicise workshops and community resources. Workshop participants used it infrequently.

This programme relied upon the work of volunteers. Although there are challenges to recruiting and retaining volunteers to manage and conduct monthly workshops, the peer leaders and health care professionals who participated in the programme were dedicated and exemplary. In addition, dedication and commitment were shown by the volunteer Expert Advisory Group that had the job of overseeing the programme, including providing feedback on workshop curriculum and materials.

Volunteers in 12 sites in ten provinces conducted workshops across Canada. Over the year that the programme was conducted, with support and mentoring by the PEP Talk team and fellow peer leaders and health care professionals, the challenges of recruiting reasonable numbers of community participants to attend the workshops were addressed and overcome in many communities. It helped if those in the communities had good links and communication with established community practises. This meant that there was reliance on the peer leaders and health care professionals linking with others they knew and worked with in the communities. More time for establishing these linkages in advance would be beneficial.

Although some health care professionals might feel threatened by having peer leaders deliver this programme and other self-management programmes, it is important to help them realise that our health care systems will not be able to support the growing prevalence of diabetes and other chronic diseases. The spirit of self-management programmes is collaboration between providers and clients who work together to define problems, set priorities and goals, determine plans and solve problems (21).

Goals of the programme are to empower people with diabetes to gain mastery over their footcare and connect them with the diabetes community for screening, preventative footcare and overall diabetes management to prevent limb loss. Feedback from community participants about taking responsibility to seek foot screenings in their local community indicated the lack of expertise of their primary care physicians and no alternative was provided. This finding is consistent with the Canadian CIHI report which indicated that 51% of people with diabetes were not receiving foot exams by health care professionals (28).

Experiences of the health care professionals and peer leaders in Aboriginal communities were different than in other communities. In one Aboriginal community, the health care professional indicated that more than half the participants needed the PEP Talk materials translated into Cree or another Aboriginal language. Variations in socio-economic status and lack of public transportation were other challenges for potential community workshop participants.

The Portal was intended to be a meeting place for the PEP Talk team, the volunteer peer leaders and health care professionals, the community participants and the public. The discussion board did not prove to be as successful for team support as email, monthly teleconferences and an

occasional site visit. This may be because those involved in the programme were more used to using the other media for interacting than the computer.

In addition it was expected that the community participants would register on-line for the workshops in their community. However, many of the community participants did not have computer access or know-how to make use of this resource to the extent expected. One would need to be thoughtful about this especially in relation to the large numbers of Aboriginal people who have diabetes but may not have the resources, opportunities or desire to use a computer and interact through a portal.

Prior to the PEP Talk community workshops, some of the participants with diabetes and their caregivers had minimal understanding of the potential limb- and life-threatening risks of foot complications due to their diabetes. The failure of diabetic footcare lies in the clinicians' lack of understanding of the behavioural impact of living with peripheral neuropathy; with neuropathy comes loss of pain sensation and this is accompanied by reduced motivation for the prevention and healing of injury (29).

The evaluation indicates that the community participants valued the community workshops and benefitted from the instruction, sharing of experiences, expertise and community linkages provided by the volunteer leaders.

Although the ability to follow up community participants was limited, 97% of those followed up reported making self-management changes to improve foot protection and management. They also reported few incidents of foot complications.

The response rate for the follow-up evaluation was either 91% of those potentially followed up or 20% of those with diabetes. As no reason was given for the three who refused to participate in the telephonic interviews, and there is no information about those who could not be followed, it is impossible to know if the present findings are biased. Nevertheless, the existing data provide preliminary information and further evaluation is needed.

Several of the participants who were followed up expressed their enthusiasm about PEP Talk as indicated by unsolicited comments, such as:

- Six respondents volunteered that they would like to attend another PEP Talk session.
- One respondent liked the idea that 'peers' led the programme.
- Many respondents indicated that they would like to attend another PEP Talk sessions – some would seek out another session if new content were added.
- One respondent indicated that she learned from the PEP session and would like to volunteer to be a peer group leader for the next session.

One of the challenges for the evaluation was the fact that follow-up of community participants was not built into the initial plan. Our lesson from this was that having the ability to know the impact of the programme after a period of weeks or months is essential and this needs to be incorporated into planning and resources.

To prevent morbidities and mortalities related to diabetes, there is an expressed need for self-management in the areas

of food choices, physical activity, medication, blood glucose monitoring and footcare. Prevention of foot complications provides benefits for individuals in terms of quality of life, for the health care system in terms of reduced costs, and for communities in terms of greater productivity. People with diabetes should have knowledge about their chronic disease, awareness about the potential complications and lifestyle choices for avoiding them.

Given the rising prevalence of chronic diseases in Canada and the demand that prevention and treatment of complications will place on health care professionals in primary care, it is more important than ever that Canadians with chronic diseases like diabetes are empowered to screen appropriately at home and recognise signs of complications, and understand what steps they can take to avert or avoid further complications. To effectively self-manage their disease, people with diabetes need a combination of skills and confidence to make sometimes-complex assessments of their health and to act in their own best interests. Programmes like PEP Talk provide this dual focus on knowledge and empowerment – building skills and self-efficacy to effectively and confidently deploy them (30–33).

While teaching self-management skills cannot counteract socio-demographic inequities in our health care system related to access to drugs or health care providers, self-management programmes like PEP Talk: Diabetes, Healthy Feet and You can help individuals build self-management competencies and self-efficacy to improve their own health. Working together with peer leaders, diabetes educators, physicians, specialists, chiropodists/podiatrists, pedorthists and other allied health professionals, people with diabetes who have strong self-management abilities can confidently play the central role in their own health team, and help to ease the demand for costly treatment of secondary complications such as ulcers and amputations.

Lessons learned include:

- It is necessary to build in evaluation of short, intermediate and long-term results in terms of changes in attitudes, behaviours and health outcomes (routine and emergency clinic visits, hospitalisations, development of foot ulcers, and amputations), i.e., to follow-up participants where they live through telephonic interviews or surveys.
- It is recommended that programmes be tailored to the specific communities' needs, including those of the Aboriginal community.
- It is preferable that knowledge and expertise exist within the specific community to address prevention and management of foot complications.
- It is imperative that strong partnerships be developed with organisations that are committed to chronic disease self-management, self-care principles and prevention of complications.

Conclusions

As a result of the successes, challenges and lessons learned, the following revisions to programme delivery and strategies

for sustaining the programme have been developed. The programme is being licenced to organisations that recognise the seriousness of foot disease and are committed to prevention and supporting patients' self-management of their footcare from a holistic perspective. Those organisations are encouraged to deliver foot screening at the end of the workshop. This allows people with diabetes and health care providers the opportunity to recognise early warning signs, and receive appropriate and timely treatment by being connected back to the diabetes, wound care and footcare community to prevent further foot complications. This new model incorporates training trainers in the community who will then be supported and mentored by the Canadian Association of Wound Care to build further expertise within these communities; multiple training workshops have been developed and are delivered online, through social media, and face-to-face to continue to support the clinical expertise of health care professionals in those communities to prevent and manage foot disease.

It has long been said that, with diabetes, 'if you ignore your feet they'll go away.' That has never been more true than today: Every 20 seconds, someone loses part of their leg due to this sinister disease. The good news, though, is that through programs like Diabetes, Healthy Feet and You, we can make a major difference in stemming the tide. (David G. Armstrong, DPM, MD, PhD, Director, Southern Arizona Limb Salvage Alliance)

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