

“A picture’s worth a thousand words”: A qualitative investigation of how a narrative film impacts diabetes awareness among Canadian homeless-shelter workers

Sarina Aryal

University of Calgary

Willem W. Groeneveld

University of Calgary

Saania Tariq

University of Calgary

Tucker Reed

University of Calgary

Jeremy Auger

The Calgary Diabetes Advocacy Committee

Brian Bowdridge

The Calgary Diabetes Advocacy Committee

Justin Lawson

The Calgary Diabetes Advocacy Committee

Anna Whaley

The Calgary Diabetes Advocacy Committee

David J.T. Campbell

dcampbel@ucalgary.ca

University of Calgary

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Abstract

Background: Homelessness presents a host of barriers for individuals living with diabetes, with stigma being a particularly pervasive issue. We created a narrative film as a knowledge mobilization tool (KMT) to address the lack of awareness around the challenges of managing diabetes while living in homeless shelters with the goal of reducing stigma related to diabetes and homelessness. The objective of this study was to investigate how a narrative film KMT impacts diabetes awareness and might inspire action among Canadian homeless-shelter workers by exploring their experiences, thoughts, and reflections after having watched the film.

Methods: A qualitative descriptive study was undertaken. Data was collected through semi-structured interviews with shelter staff across Canada and inductively coded using thematic analysis techniques. Themes were developed from the coded data by examining connections between codes and identifying broader patterns of shared meaning across the data. Trustworthiness was achieved through reflexive practices, double coding, and creating an audit trail.

Results: Eleven shelter staff participants were recruited from homeless shelters across Canada. Four themes were identified through data analysis: 1) “Film is so digestible”: Accessibility of narrative film as a KMT; 2) “Yes, we are living that”: The film validates the struggles of shelter staff through its accurate portrayals; 3) “It shouldn’t be that hard”: Relating to and internalizing the messages from the film; and 4) “They might not be talking about it, but that doesn’t mean that it’s not something that they’re managing.”: The film inspires mindfulness and awareness.

Conclusion: This study found that the impact of a narrative-film-based KMT on its audience is driven by the film’s approachability, relatability, realism, and ability to foster connection. These strengths suggest that film can be an effective medium for knowledge mobilization projects.

INTRODUCTION

Diabetes is a chronic condition characterized by the dysregulation of the body’s blood sugar levels that affects roughly 10% of the Canadian population.^{1, 2} Complications and challenges with managing diabetes can lead to hyperglycemia (high blood sugar), which can permanently damage the body’s organs and nerves, as well as hypoglycemia (low blood sugar), which can cause seizures, loss of consciousness, and, in severe cases, even death.^{3–5} Avoiding these negative health outcomes requires individuals to make extensive health behaviour changes, such as monitoring blood sugar levels, visiting healthcare professionals regularly, eating a nutritious diet, and taking their medication as prescribed.^{6, 7} While these self-management practices are necessary for managing diabetes, they can be overwhelming and mentally taxing.⁸

Living with diabetes while experiencing homelessness presents a host of additional barriers to diabetes management, including: (1) financial constraints that limit access to medications, nutritious foods, and transportation to health services; (2) suboptimal conditions at emergency shelters, such as limited food

choices and challenges maintaining consistent routines for meals and medications (3) difficulties being contacted for follow-up appointments due to not having a consistent address or phone number; and (4) the emotional and mental burden of balancing diabetes with their other challenges.^{9–14} The consequences of these barriers are reflected by the high mortality and morbidity rates observed among those with diabetes who find themselves living in this situation.^{15–17} Given their regular interactions with people experiencing homelessness, shelter workers represent an important group to engage in efforts to increase diabetes awareness and support diabetes self-management. Our previous findings describe the stigma and misconceptions, including assumptions of substance use and personal blame, due to limited knowledge about diabetes among shelter workers.¹⁸ These misconceptions are particularly important given that shelter staff may influence residents' access to medications, blood glucose monitoring supplies, and food, and may misinterpret symptoms of hypoglycemia or hyperglycemia as intoxication or withdrawal.

The misconceptions observed among shelter staff reflect broader stigmas associated with both homelessness and diabetes. Anti-homeless stigma limits access resources, including healthcare, by dehumanizing those affected and leading to unequal treatment and negative health outcomes.^{19–21} Diabetes-related stigma also negatively impacts those with the chronic health condition by placing blame on individuals for developing diabetes and for how they manage their condition, contributing to poor self-perception and mental well-being and creating challenges for self-management..²² For individuals experiencing both diabetes and homelessness, these overlapping stigmas can lead to feelings of shame surrounding multiple aspects of their social and health circumstances, including their vulnerability and reliance on ineffective social and health systems.²³ These stigmas reflect subjective social values that uphold an arbitrary status quo.²⁴ They are perpetuated by societal ignorance of the issues faced by those subjected to them, creating barriers that deny people with diabetes experiencing homelessness their right to compassionate care.²⁵ Increasing awareness among those who regularly interact with people experiencing homelessness, including shelter workers, may therefore be an important strategy for addressing stigma and improving support.

Recognizing the need to address the challenges faced by people with diabetes experiencing homelessness, the Calgary Diabetes Advocacy Committee (CDAC) is a community-based participatory research group, composed of individuals with lived experience of both diabetes and homelessness, as well as academic researchers. In 2022, the group conducted a nominal group exercise and ultimately decided that addressing the stigma and lack of awareness that affects people with diabetes experiencing homelessness was their collective priority.²⁶ A film-based Knowledge Mobilization Tool (KMT) was developed by the group with partners from the homeless-serving sector and medical professionals to raise awareness and combat stigma.^{26, 27} Their narrative film, entitled *Low*, follows the story of Bobby, an individual living with diabetes who is experiencing homelessness, showcasing the stigma and ignorance of others that he confronts while trying to manage his blood sugars, food intake, and insulin dosing.²⁸ A previous quantitative study of this film using pre-and-post survey responses, found a significant improvement in audience members' Knowledge, Attitudes, and Beliefs (KAB) towards

both diabetes and homelessness after having watched the film.²⁹ However gaps still remain about what led to these changes in KAB and if the film successfully provided “calls to action” that were perceived by audience members. The objective of the present study is to investigate how this film (*Low*) impacts diabetes awareness and inspires action among Canadian homeless-shelter workers by exploring their experiences, thoughts, and reflections after having watched the film.

METHODS

Study Design

A qualitative descriptive study was undertaken to explore Canadian homeless-shelter workers’ experiences, thoughts, and reflections after having watched the film, *Low*.^{30–32} This study was approved by the University of Calgary Conjoint Health Research Ethics Board (REB23-0764).

Recruitment & Participants

Staff working with people experiencing homelessness in shelters across Canada were recruited using convenience sampling. Film screenings were organized at shelters across Canada. The screening events began with a short introduction to the CDAC and the purpose of the film and how it was made. Following the film, research staff (SA, ST, and DJTC) facilitated a question-and-answer period with co-researchers and audience members. During this time participants were presented with a QR code to sign up to participate in the study. Scanning the QR code would bring prospective participants to an online survey, where they were first presented with the study consent form and prompted to provide electronic consent. After the participant had given their consent, the online survey then asked participants several demographic questions followed by a prompt to input their contact information to be contacted to set up an interview.

Data Collection

Semi-structured interviews were conducted with shelter staff between September 2024 and December 2025 using Zoom, a video conferencing platform which offers recording and transcription software. To minimize potential pressures associated with recruiting participants through their workplace, participation was emphasized as voluntary and independent of their employment. Interviews were conducted privately, and participants were assured that their responses would remain confidential and would not be shared with their employers. The interview guide was informed by Worton et al’s Community Knowledge Mobilization Evaluation framework,³³ which was developed to help the creators of KMTs evaluate their tool’s efficacy. Interview questions were organized into five sections: 1) opening questions; 2) perceptions and attitude questions; 3) awareness questions; 4) action questions; and 5) closing questions. The interview guide was reviewed and revised by the CDAC to ensure relevance and understandability. Participant information was de-identified to ensure the anonymity of participants.

Interview recordings were transcribed verbatim using Zoom's transcription function and subsequently de-identified for storage. Identifiable information is stored in a secure server accessible only to the study team.

Data Analysis

Using the Braun and Clarke guidelines, thematic analysis was conducted to identify distinct patterns of meaning and ideas from the transcripts, revealing how Canadian shelter workers perceived the film as a KMT.³⁴ Following Braun and Clarke's six steps of thematic analysis,³⁴ transcripts were reviewed iteratively to ensure a robust familiarity with the data, with ideas for potential codes and themes being noted throughout this process. The initial coding process then captured snippets of text which independently held meaning or ideas and coding them as shorthand for the meanings or ideas that they held. These codes were then organized into a codebook. Coding was done inductively and was organized using the qualitative research software NVivo (MacOS version 14).³⁵ Two independent coders (either SA, WG, or HC) coded each transcript. Analysts regularly met for peer review to discuss coding decisions for each transcript. Once all transcripts had gone through the initial coding process, preliminary themes were developed, connecting different codes through their shared meanings or ideas, reviewing them, and developing them further. These preliminary themes were presented to the research team, and CDAC co-researchers during a lab meeting for peer review and discussion. This entire process was recursive, and one step did not necessarily lead to the next, requiring us to return to the source material to once again search for codes and develop new themes from them.³⁶

Trustworthiness

Trustworthiness refers to the degree of confidence research consumers place in a study's findings. There are four conceptual pillars that uphold this quality of trustworthiness: credibility; transferability; dependability; and conformability.³⁷ Credibility in our study was promoted through the maintenance of researcher reflexivity throughout all stages of the study. Detailed participant demographic data collection and reporting promoted transferability, helping readers understand our study's context and who the participants were. Dependability was established through a clear audit trail describing the methods for data collection and documentation of decisions in analysis. Conformability of the findings was ensured through double coding and peer-review of codes and themes as they were being developed.

RESULTS

Participants were recruited at 20 film screenings for shelter staff across Canada. A total of 90 individuals opened the QR code or link to our recruitment, of which 42 completed the consent form and provided their contact information. Of these 42, 31 did not respond to any contact attempts, leaving 11 participants in this study. Detailed participant demographics can be found in Table 1. The duration of these interviews ranged from 21 to 65 minutes.

Table 1
Demographic characteristics of interview participants.

Characteristics	Category	Count (n = 11)
Age	18–34	3
	35–54	5
	55+	1
	Prefer not to say	2
Gender identity	Woman	10
	Non-Binary	1
Education	Trade certificate or diploma	3
	University certificate, diploma, or degree at the bachelor's level	6
	Graduate or professional degree (masters, doctorate, MD, JD)	2
Previous work experience in healthcare	Yes	5
	No	6
Role at Shelter	Management	2
	General shelter staff	7
	Healthcare	2
Canadian province of employment	Alberta	9
	Nova Scotia	1
	Ontario	1
Live/are close with someone with diabetes	Yes	5
	No	5
	Prefer not to say	1

Four main themes were developed from the coded interview transcripts: 1) *“Film is so digestible”*: Accessibility of narrative film as a KMT; 2) *“Yes, we re living that”*: The film validates the struggles of shelter staff through its accurate portrayals; 3) *“It shouldn't be that hard”*: Relating to and internalizing the messages from the film; and 4) *“They might not be talking about it, but that doesn't mean that it's not something that they're managing.”*: The film inspires mindfulness and awareness. Together, these themes offer insight into many facets by which the film impacted the emergency shelter staff audiences.

Theme 1: “Film is so digestible”: Accessibility of narrative film as a KMT

Many participants acknowledge that the “film is so digestible” (Interviewee 6), highlighting the accessibility of knowledge and message presented in the film. The accessibility offered by the film was twofold, organized here into two distinct subthemes: 1) “A picture’s worth a thousand words” (Interviewee 4): presenting the messages through film made the messages more accessible and approachable compared to printed media or a lecture,; and 2) “like you’re walking along with them” (Interviewee 2): presenting the messages through a narrative helped the audience follow along and absorb the messages.

Theme 1; Subtheme 1: “A picture is worth a thousand words”: Film as an effective KMT

Many participants voiced their appreciation for being able to learn by watching something rather than having to read or listen, seeing it as a more passive activity, and hence more approachable, method for learning.

“There are some people who love reading right but most people are going to be like, I ain't got time for that. [laughs] ... If you tell people ‘hey, there's this film that you can watch that's really going to explain or, you know, make you think about this’, then I think people are more willing to engage with something kind of more easily digestible, that they can just kind of sit and absorb.” (Interviewee 6)

Participants praised film as being an effective use of their time. They found that “*the [film’s] message was very clear and very concise.*” (Interviewee 5), adding to its approachability. One individual stated: “*Many people are going to video because they don't have the time to look up resources and books and so on.*” (Interviewee 4)

Theme 1; Subtheme 2: “It’s like you’re walking along with them”: Narrative as an effective KMT

In addition to the media of film, many participants were able to connect with it through its narrative structure, allowing them to follow along a fictional story and absorbing its intended messages. They also noted its persuasive power and ability to broaden audiences’ understanding and attitudes about social issues.

“I think film is profound. Stories are profound. Stories come alongside of you to make you be aware of what's going on in you as a viewer and where are you in the process as you're viewing this.... when someone speaks at you, and they're telling you something it can actually put defences up sometimes, because the delivery is different. Whereas stories come alongside you and disarm you. You can then go into it.” (Interviewee 11)

The sentiment that the film was “*creating someone’s story*” (interviewee 6) seemed to be fostered through its creation of an emotional intimacy with the audience, helping to establish a deep connection between them and its messages and subject matter: “*I just...I see the humanity in the film, and I see the*

realism in it, you know. You get to take a look at someone else's life, and it's... it's pulling the screen back from your privilege.” (Interviewee 9)

This emotional intimacy fostered greater empathy for the characters, allowing viewers to reflect on their struggles and challenges compared to their own experiences: *“it's very easy for me to maintain the role of someone who works in a shelter and not think about the feelings of another person. But when it's visceral like that, you're like, 'Oh yeah. Now I'm finally seeing it from their point of view.'”* (Interviewee 2)

Theme 2: Yes, we are living that”: The film validates the struggles of shelter staff through its accurate portrayals

The film's accuracy in portraying the reality of shelter workers and clients' lives through an accurate depiction of the shelter environment was repeatedly described by participants as impressive. Participants noted that *“some of the things that were said in the film [were] actually things [they've] heard”* (Interviewee 4). Additionally, many participants were impressed with the film's accurate reflection of not only the lived experiences of clients with diabetes at the shelter, but also their own lived experience: *“There was a few things that was showed there and I'm like, yes, we are living that, like my clients are living that life. They showed us staff are feeling that too right. It was pretty bang on a lot of things, for sure, and it exceeded my expectations.”* (Interviewee 1)

The film's portrayals of the struggles faced by the shelter workers were especially appreciated by the participants, acknowledging the situation they find themselves in is also far from being ideal, helping to validate their plight and remove blame by showing they are simply *“trying to support as best they can”* (Interviewee 5). The feeling of validation stemmed from the film's portrayal of the significant demands placed on shelter staff while lacking sufficient or appropriate resources to meet these demands.

“... it showed the demand on [the shelter worker in the film's] job and how also there was a lack of resources for her to be able to do her job properly and even training and that I know they were understaffed as well too.....There are people that want to help that are client facing, but they also don't even have the tools. I think that was nice the film showed that side too.” (Interviewee 3)

Theme 3: “It shouldn't be that hard”: Relating to and internalizing the messages from the film

Beyond praising the film's accuracy, being able to personally relate to scenes from the film also drove its impact amongst shelter workers, establishing connections between the lived experiences of the participants and the film's narrative: *“I thought it was really powerful. Honestly, I thought there was a lot of touch points, that I could relate to, or I could remember and see... there are really key scenes in there, that just kind of stuck with me, just based on how it was portrayed”* (Interviewee 5)

While the participants described many parts of the film they were able to relate to, specifically being able to relate to problematic scenes and issues presented in the film was often mentioned as having resonated with them.

"To see [people] not being able to store their medication, or not being able to access care and things like that... That really struck me too. It's like even if people are attempting to make good choices and manage their own health. The system is set up that it makes it very difficult for them." (Interviewee 8)

Being able to relate these problematic and issue-laden scenes to their lived experiences as shelter workers helped the participants reflect on them internally, comparing what they were seeing on screen to what they had seen in the workplace, giving them important context to the issues being faced by the film's main character. This internal reflection led to them voicing the messages of the film from their own perspectives, which many expressed through monologues during the interview.

"When he's asking for his insulin over and over, and she's like, oh, we're short-staffed, and she is like, why don't you take more [insulin])? Sometimes I catch myself making, like, these ignorant comments and then realizing 'oh, wait a second, that wasn't nice or it wasn't helpful'. Maybe I need to just pause and do one thing at a time." (Interviewee 7)

Theme 4: "They might not be talking about it, but that doesn't mean that it's not something that they're managing.": The film inspires mindfulness and awareness

Participants described what they had witnessed during the movie as being not only informative but also "enlightening" (Interviewee 1), revealing how unaware they had been of the issues faced by those living with diabetes. The scene depicting the main character's severe hypoglycemic event was often cited as being particularly impactful as it showcased how it can present similarly to being intoxicated.

"It wasn't on my radar. I guess a crossover between homelessness and diabetes is that it wouldn't be my initial thought but because it was brought up in the movie, I was like, 'yeah, actually, I should be looking out for that' because people's breath can smell fruity. But that also happens with alcoholism. It's like people stumble, but that also could be diabetic shock. So, I think the short film did a really good job of combining those two things in my mind." (Interviewee 2)

The movie also led many participants to have similar realizations in regard to the role their innate biases play in perpetuating stigma, and the importance of recognizing these biases before they act on them.

"I think that the most powerful message was just to leave space and to remember that you don't always know what people are experiencing and managing. And that even if something seems really obvious to you, that might not be the case, right? Yeah, I feel, like, with experience comes kind of almost like a default mode when you're working. But it's important to not get into that default too much and to be like, 'hey', you know, 'there might be some things that I'm not thinking about here'." (Interviewee 6)

Realizing how unaware they were inspired many of the participants to bring their newfound awareness into their everyday lives. Participants described being motivated to learn more about diabetes themselves, think about ways that they can implement small changes to "be a more effective support person" (Interviewee 6) with the goal of improving the experiences of clients with diabetes.

“Another person who came in one day. He seemed very cheerful but also seemed a bit out of it, and his breath that was sort of [smelled] like...If you could mix, like, acetone with apple juice kind of smell, and I was like, that's not alcohol breath, I know that. I know that's not drugs... And then I immediately went to the film. I wonder if he's diabetic, so I asked him, and he wouldn't disclose anything. So, ... then I discreetly connected him with the nurse....” (Interviewee 7)

Not only were participants inspired to make changes in their everyday lives, but they were also inspired to spread their newfound awareness amongst their fellow shelter co-workers:

“I know I was debriefing this with my team, and I think everybody agreed with the fact that while we never actually view diabetes like this, I know the other day somebody was presenting in a certain way and one of the staff members who had seen the video is like, ‘Oh, my God! Do we know if they're intoxicated or they're having a low?’ And we're like, ‘Oh, wow! Like you still remember the movie?’ Right? So, I think, for us as a team it did resonate, because we're now so mindful about making those assumptions right?” (Interviewee 5)

DISCUSSION

This study sought to investigate how the narrative film, *Low*, as a KMT impacts diabetes awareness and inspires action among Canadian homeless-shelter workers. Our study contributes to the body of literature on the use of film as a KMT for increasing awareness, reducing stigma and inspiring action. Overall, participants of this study found the film to be accessible, approachable, and realistic, enhancing their connection to its messages and increasing their empathy towards people with diabetes residing in shelters. As a result, many participants became motivated to learn more about diabetes, share their newfound knowledge with colleagues, and make changes to areas within their control to support their clients facing similar challenges. These findings indicate that the film is perceived to be an influential KMT for increasing awareness and knowledge around social and health issues among shelter staff.

Other groups have also documented how films can be powerful KMT for increasing awareness of complex issues, such as disparities in social and health outcomes.^{38, 39} Narrative films, in particular, can persuade audiences to change their attitudes and beliefs about complex or stigmatized social or health issues by presenting the experiences, perspectives, and challenges of people in such circumstances through storytelling.⁴⁰ Previous medical education studies show that film can improve viewers' understanding of a subject matter by enhancing engagement with the topic through narration and visuals, which are often missing in traditional teaching materials.^{41,42} Narration was found by D'Agostini et al.'s participants to create a more nuanced understanding of the topics they were exploring in their psychiatric training by experiencing and understanding the patient perspective.⁴¹ Similarly, participants in our study found film more engaging and accessible than knowledge mobilization methods that require passive listening or reading. The narrative feature of *Low* allowed the participants to resonate with the film characters by seeing their lived experiences portrayed on screen while learning about the challenges

faced by clients with diabetes. This suggests that narrative films can enhance the understanding of complex issues when the film is perceived to be relatable and engaging.

One of the key objectives of the film, *Low*, was to address diabetes stigma experienced by people living in shelters. Limited research has been done on the use of film to address stigma on this specific topic; however, literature on mental health^{43–45} and HIV/AIDS,^{46, 47} support its use. To effectively address stigma through film, the messages presented must feel authentic and relevant to the intended audiences.^{46, 47} The study participants appreciated the film's authenticity, especially its acknowledgment of their lived realities and the challenges they face at the shelter. This authentic representation enhanced the film's perceived validity and participants' willingness to actively engage with the messages being presented. Their engagement with the film's messages raised awareness about the challenges faced by people with diabetes residing in shelters and helped them challenge their assumptions and stigmatizing beliefs, which affect their interactions with clients. Similarly, Catalani et al. described changes in discriminatory beliefs and attitudes around HIV among participants in rural South India after viewing a narrative film about a child with HIV.⁴⁷ This was attributed to participants having greater awareness of stigmatizing incidents they had witnessed or heard about towards children with HIV in their community.⁴⁷

Our findings corroborate previous literature findings of the use of film as a KMT to address stigma around health and social conditions. However, the limitations of this study should be considered when interpreting the findings. First, it is entirely possible that the shelter workers' connection to this film exists on a continuum, with only those who connected strongly with the film being enthusiastic enough to participate in a post-screening interview, leaving those who connected with the film less strongly (or potentially not at all) unaccounted for in this study's findings. A second limitation impacting the findings of this study is the lack of male participants, as gender influences people's worldview and experiences, which could be applied to their experience with the film leading to differing perspectives or additional insights. Third, the study experienced substantial attrition between initial expressions of interest and interview participation. Although 42 individuals initially expressed interest following the film screening, only 11 ultimately completed an interview. We suspect that this attrition may partly reflect the challenge of translating interest immediately following the screening into subsequent research participation, as competing demands on participants' time and availability may have affected their ability or motivation to participate. Finally, the study's findings are limited to people working at shelters or with unhoused individuals living with diabetes due to purposive sampling and a small sample size. This restricts the application of knowledge about KMT's influence on awareness and knowledge about stigmatized conditions to other populations, such as policymakers or the public. Despite these limitations, a strength of this study was the use of a qualitative descriptive study design. An in-depth qualitative exploration of shelter workers' thoughts, experiences, and reflections revealed how the film influenced their understanding and attitudes towards clients with diabetes at their workplace. This depth of understanding cannot be achieved with quantitative methods. An additional strength of this study was the participation of CDAC co-researchers, who provided input into the interview guide through revising

questions. This ensured the questions were relevant and meaningful to individuals with diabetes experiencing homelessness. Future studies should delve deeper to develop a theory to understand mechanisms by which film as a KMT can reduce stigma and influence behavioral change around conditions that are highly stigmatized such as homelessness and diabetes.

CONCLUSION

The findings of this study revealed potential drivers of the impact a narrative-film-based KMT has on its audience. These drivers, namely the narrative film's approachability, relatability, realism and ability to cultivate connection, appear to be particular strengths. Therefore, other people working knowledge mobilization projects might consider using film as a medium to impact intended audiences.

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