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Harm reduction in substance use: perspectives and experiences of community volunteers and student interns in Durban, South Africa

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Abstract

Background Substance abuse is a significant public health concern globally, exposing individuals to substantial health risks and mortality. Despite the effectiveness of harm reduction interventions, they remain limited and inadequately accessible in South Africa, where substance use prevalence is increasing. This study explores the perspectives of community volunteers and student interns on harm reduction and its interventions using Bellhaven Harm Reduction Centre as a case study.

Methods This qualitative study employed a cross-sectional design, utilising thematic analysis to examine the views of 15 participants on harm reduction programs and their experiences within the harm reduction centre context.

Results The findings indicate that harm reduction interventions have a positive impact on all stakeholders, fostering transformative attitudes toward substance use and promoting empathy and understanding. Our findings highlight four major themes: the client-focused nature of harm reduction interventions, their ability to reduce stigma and discrimination against marginalised populations, their capacity-building nature, and ability to reduce substance abuse-related harm.

Conclusion This study highlights the value of harm reduction programs in addressing substance use challenges, emphasizing client-centered care, capacity building, and stigma reduction. The findings provide a valuable model for resource-constrained environments, informing policy and practice to improve health outcomes among vulnerable populations.

A description of what the article reports

This non-clinical study reports qualitatively on perceptions of harm reduction and its interventions by community volunteers and tertiary university interns based on Bellhaven Harm Reduction Centre in Durban, South Africa.

Keywords Harm reduction, Substance use, Client-centered care, Stigma reduction, Community engagement, South Africa

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Background

Substance use poses a significant global health challenge, with far-reaching consequences for individuals, families, and communities [1]. Globally, substance use is associated with substantial health risks, mortality, and morbidity, particularly with substances like alcohol, marijuana, cocaine, heroin, opium, and sedatives [2–4]. In Africa, substance use is a growing concern, especially among adolescents and young adults, with rapid increases in substance use and disorders straining economies, healthcare systems, and societies [5].

In South Africa, substance use is a significant challenge, particularly among youth. A qualitative study at the Soshanguve SANCA Rehabilitation Centre found that substance use disorder among young men stems from deeper structural issues related to identity and belonging, highlighting the need to address underlying societal factors [6]. Commonly used substances in South Africa include cannabis, sedatives, amphetamine-type stimulants, cocaine, opiates, alcohol, and ecstasy, with varying prevalence rates among youth and adults [7, 8]. Nyaope has also emerged as a significant concern [9]. Heavy or excessive substance use over time is often associated with substance use disorders (SUDs). These are complex conditions characterised by loss of control, persistent use despite adverse outcomes, and increased risks of mortality, morbidity, and health complications [10, 11]. Loss of control in this context is a subjective experience reported by individuals, often assessed through self-reported measures. It is important to acknowledge the potential stigma associated with the diagnostic language (substance use disorder), which can impact individuals' willingness to seek help. SUDs involve multifaceted aspects, and the term provides a framework for healthcare professionals to understand and treat substance use issues.

Substance use prevalence varies by factors like gender, with men generally exhibiting higher rates of substance use disorders [12]. The economic burden is substantial, with estimated annual costs in billions of dollars, encompassing healthcare expenditures such as hospitalisations, and rehabilitation programs and crime-related expenses including law enforcement, incarceration, and legal proceedings [13]. Fortunately, substance use disorders are treatable mental health conditions, and evidence-based interventions, including harm reduction strategies, can facilitate recovery and help individuals regain control over their substance use even in clinical settings [14].

Harm reduction: a promising approach

Harm reduction interventions aim to mitigate the negative consequences of substance use, such as overdose and infectious diseases without requiring complete abstinence [15, 16]. Its approaches prioritise reducing harm, promoting health and human rights [13, 15]. By

challenging stigmatising language and policies, these strategies aim to create a supportive environment for individuals who use substances. These strategies include syringe exchange programs, safer injection facilities, overdose prevention programs, and opioid substitution treatment [15–17]. According to a global report on harm reduction programs for people who inject drugs, released by Harm Reduction International in 2020 examining the availability and accessibility of harm reduction services, the implementation of harm reduction approaches differs significantly between the Global North and Lowand Middle-Income Countries (LMICs) [18]. Among the Global North countries, harm reduction services are well-established [18]. However, both the Global North and LMICs struggle to provide access to harm reduction services in rural areas, but LMICs face more significant challenges. LMICs' harm reduction initiatives face challenges due to limited resources and infrastructure [18]. A recent study by Sarkar et al. [19] highlighted key barriers to substance use disorder treatment in LMICs, including perceived lack of problem, low motivation, inadequate family support, and limited access to effective treatment. It is important to tailor harm reduction approaches to specific cultural and social contexts. For instance, Islamic law and cultural norms in some LMICs may influence the implementation of harm reduction services [18].

Harm reduction practitioners view excessive substance use as a chronic illness requiring treatment [20]. These approaches have proven effective in reducing morbidity, mortality, and health risks associated with substance use, including sexually transmitted infections and unwanted pregnancies [21, 22]. Vulnerable populations, such as youth and adolescents, benefit significantly from harm reduction interventions due to their ongoing biological, cognitive, and psychological development. Harm reduction approaches prioritise individual needs and autonomy, promoting dignity, respect, and accountability for substance users through person-centered care. An American study exploring harm reduction principles in healthcare settings beyond substance use defined six key principles: humanism, pragmatism, individualism, autonomy, incrementalism, and accountability without termination [15]. These principles aim to foster supportive and non-judgmental care, potentially improving healthcare outcomes and treatment adherence.

The benefits of harm reduction approaches are multifaceted. By providing non-judgmental services, harm reduction strategies empower individuals to manage their health and well-being, fostering self-respect, autonomy, and accountability. Studies have shown that these approaches can increase service access, maximise equity, and improve quality along the continuum of care [18]. Additionally, harm reduction approaches have been associated with improved quality of life and reduced

harm [23]. To maximise effectiveness, harm reduction interventions should be tailored to local contexts. This involves assessing local substance use patterns, identifying health risks, and developing context-specific interventions that cater to distinct needs. Collaboration with stakeholders, including substance users, healthcare providers, and community organisations, ensures culturally sensitive and effective interventions. Adapting to local policies and laws also ensures feasibility and sustainability. By adopting a harm reduction approach, South Africa can move towards a more effective and equitable response to substance use, addressing complex individual and community needs. This approach prioritises evidence-based interventions promoting health, dignity, and well-being, and provides critical health services like overdose education and prevention of infectious disease transmission.

Criticisms and limitations of harm reduction

Critics argue that harm reduction approaches may legitimise substance use, potentially leading to increased use or unintended consequences [24]. However, this criticism stems from a fundamental misunderstanding of harm reduction principles, which prioritise reducing harm and promoting health and well-being [20]. In South Africa, harm reduction strategies aim to address complex individual needs and not to promote substance use. Some critics argue that the term "harm reduction" can be misleading if programs do not prioritise actions benefiting the largest number of people [25]. Others highlight conceptual constraints and lack of clear moral commitments as barriers to harm reduction's full potential, suggesting the need for a more adaptive approach [26, 27]. Despite these limitations, harm reduction interventions have demonstrated significant benefits, including reduced overdose, mortality, and increased healthcare access. It is essential to acknowledge both the strengths and limitations of harm reduction approaches. While criticisms can inform improvements, they should be considered in the context of the significant benefits harm reduction has shown in reducing harm and improving health outcomes for individuals who use substances.

Study purpose

Despite South Africa's increasing excessive substance use prevalence, harm reduction services remain limited and inadequately accessible. Furthermore, harm reduction interventions in South Africa have received inadequate attention in literature. This qualitative study addresses this knowledge gap by exploring perspectives of community volunteers (people who engaged in activities and performed services to serve clients at Bellhaven Harm Reduction Centre without any monetary benefits) as well as Social Work and Homeopathy student interns on harm

reduction and the various interventions undertaken at Bellhaven Harm Reduction (BHRC). By capturing participants' voices, this study sheds light on the benefits and limitations of harm reduction interventions, informing future program development.

Methods

Researcher positionality

The first author's involvement with BHRC began as a community volunteer, prior to initiating this study. As a trained Social Scientist, he brought a research background in public health, particularly in community engagement and population health issues. His experience spans multidisciplinary projects, including evaluations of health programs and studies on lifestyle risk behaviors. Initially, his understanding of excessive substance use recovery was rooted in traditional abstinence-based approaches. However, through prolonged engagement with clients and staff at BHRC, his perspectives underwent significant transformation. Observations and interactions revealed the value and effectiveness of harm reduction approaches in addressing substance use challenges. This experiential knowledge currently informs his advocacy for harm reduction programs in public health contexts. Recognising the influence of personal experiences on research perspectives, he acknowledges the potential for bias. However, this transformative experience also fostered a deeper understanding of harm reduction's importance, enhancing the study's validity and relevance. As a researcher with experience in public health research, he strives to provide an understanding of harm reduction approaches.

Study design

This qualitative study employed a cross-sectional design to explore the perspectives and experiences of community volunteers and university interns at BHRC. A qualitative approach was chosen to gain an in-depth understanding of participants' views on harm reduction programs and their experiences within BHRC's context, allowing for the collection and analysis of rich, contextual data. The cross-sectional design enabled us to capture participants' perspectives and experiences at a specific point in time, providing a snapshot of their perceptions without requiring longitudinal tracking or follow-up. This design was deemed suitable given the study's focus on understanding subjective experiences and views. A qualitative approach was selected over mixed methods due to its emphasis on exploring complexities and details of participants' experiences. This approach allowed flexibility and adaptability, enabling us to capture the specific context of BHRC and provide a rich understanding of harm reduction approaches in addressing substance use challenges.

Study setting

The study was conducted at BHRC, an outpatient clinic situated in an urban setting in Durban, South Africa. Specifically, the BHRC clinic operates within a shared space with taxi industry businesses' offices, providing a unique context for service delivery. BHRC serves marginalised populations, including people experiencing homelessness, individuals struggling with substance use disorders, sex workers, and other vulnerable groups in Durban. The clinic offers a range of harm reduction services, including Opioid Substitution Therapy (OST), HIV/AIDS counselling, testing, and treatment, Tuberculosis (TB) screening and treatment, psychosocial support services, shower facilities for homeless individuals, and referrals to hospitals. The urban location of BHRC and its shared space with taxi industry offices highlights the complexities of service delivery in resource-constrained environments. This context is crucial for understanding the experiences of participants and the operational dynamics of harm reduction programs in similar settings [28].

Study participants

This study involved a total of 15 participants, comprising community volunteers and student interns at BHRC. The participants included 5 males and 10 females, with a diverse range of ages and backgrounds. Specifically, the sample consisted of 2 community volunteers (1 female, aged 19, and 1 male, aged 27), 3 final-year Student Social Workers (2 males, aged 23, and 1 female, aged 30), and 10 postgraduate Homeopathy students (2 males, aged 24 and 25, and 8 females, aged 23-26). While the participants represented different racial groups, the BHRC management at the time discouraged the inclusion of racial information in the study. Nonetheless, the sample's diversity in terms of age, gender, and field of study provided a rich perspective on harm reduction programs and experiences at BHRC. The participants' prior experience and exposure to harm reduction services varied, with community volunteers having direct experience working with BHRC's target population and student interns gaining practical experience through their internships.

Sampling

The study employed a purposive sampling strategy to recruit participants who were uniquely positioned to provide rich insights into harm reduction programs and experiences at BHRC. Specifically, the sample consisted of community volunteers and student interns who were actively engaged with BHRC at the time of the study. Purposive sampling was deemed the most suitable approach for this study because it allowed for the selection of participants who had direct experience with the phenomenon under investigation. By targeting community volunteers and student interns who were

intimately familiar with BHRC's programs and services, we were able to gather rich and context-specific insights that would be difficult to obtain through other sampling methods. The purposive sampling strategy ensured that the participants' experiences and perspectives were relevant to the study objectives, thereby enhancing the validity and relevance of the findings. The sample size of 15 participants was considered sufficient for achieving the study objectives, given the qualitative nature of the research and the depth of insight required. The sample size allowed for a detailed exploration of participants' experiences and perspectives, providing a rich understanding of harm reduction programs and services at BHRC.

Data collection tools

A structured interview guide was developed and utilised for data collection. To ensure the guide's clarity, relevance, and effectiveness, we conducted a pilot test with two volunteers (one male and one female) who were not part of the main study. The pilot test involved administering the interview guide to these volunteers and gathering feedback on its comprehensibility, flow, and ability to capture the desired information. Based on the feedback received from the pilot test, we refined the interview guide to improve its clarity and relevance. The pilot testing process allowed us to identify and address any ambiguities or confusing questions, ensuring that the final guide was effective in capturing the participants' experiences and perspectives. The refined guide was administered online, allowing participants to respond flexibly and conveniently.

Data collection process

A structured interview guide was sent to all 15 community volunteers and student interns at BHRC. All 15 participants responded to the interview guide, resulting in a 100% participation rate. The online data collection approach allowed participants to respond to questions at their convenience, providing flexibility and enabling them to thoughtfully consider their responses. The online data collection method offered several advantages, including reduced logistical barriers and increased participant comfort, which may have contributed to the high participation rate. However, it also presented some challenges, such as ensuring participant engagement and addressing technical issues. To mitigate these challenges, we sent reminders and follow-up messages to participants who took longer to submit their responses. Additionally, we were able to probe additional information and seek clarity where needed, which helped to ensure the quality and richness of the data. The online data collection approach was designed to minimise pressure on participants by allowing them to respond at their own pace and in a setting that was comfortable for them. While we did not formally assess the impact of the data collection method on participant pressure, the flexibility and convenience of the online approach likely contributed to a more relaxed and reflective response process.

Data management and analysis

We employed thematic analysis, a systematic approach to qualitative data analysis [29, 30]. The six-phase process facilitated a comprehensive examination of the data. Researchers first familiarised themselves with data by engaging in repeated readings of qualitative 'survey responses'. This was followed by the initial coding with careful review of transcripts. The process yielded a comprehensive set of codes. The next phase was theme identification where researchers sought patterns and relationships across the data. Themes were then reviewed and refined paying attention to coherence, consistency, and thematic distinctions. We then identified and refined themes defining their essence and scope. The final step was compiling the findings into a comprehensive report.

Results

The aim of this qualitative study was to explore perceptions of harm reduction interventions of community volunteers and student interns at BHRC. Recurring themes from the findings include that harm reduction centres are client-centered, mitigate stigma and discrimination, contribute to capacity building and mitigate substance use-related harm.

Client-centeredness

Most participants held positive views of BHRC, describing it as welcoming and an inclusive environment for all. Specifically, they perceived BHRC as a "home away from home" where clients felt a strong sense of belonging, a non-judgmental space where individuals felt accepted unconditionally regardless of their backgrounds and circumstances. One of the participants mentioned:

It's a place of hope, rebuilding and restoration. I have spoken to many of the clients here. Listening to their stories, they feel at home here, unjudged, accepted and loved. This place has brought some hope for change for many of them.

Mnotho, a male Student Social Worker aged 25. This centre means a lot to me as it is proof of the positive impact that a group of people can have on those who are vulnerable. My experience here has been beneficial, this place has exposed me to parts of society that are often forgotten or neglected. This place is like a home for many of these clients. They feel free and welcome as they are.

Ayo, a female volunteer aged 21.

From the above findings, participants viewed BHRC as a substitute for a safe, familiar space implying that BHRC had successfully created a supportive environment, addressing the emotional and social needs of its clients. However, one of the participants critiqued BHRC for being too busy:

Bellhaven is too busy. It's taxi people this side, there is Bellhaven this side. On the other side of the fence its many homeless people doing drugs in the park. Many people move in and out of the place. There are people selling drugs close by. I don't think it's easy for clients here to let go of drugs. They are sold everywhere. These clients should really be determined to live without drugs.

Laz, a male volunteer aged 30.

This participant's comment highlights the complexities of providing harm reduction services in challenging environments, such as BHRC, where substance availability is widespread. While the participant emphasised the need for clients to be determined in their recovery, their perspective also suggests a potential mismatch between their expectations and BHRC's harm reduction approach. Specifically, the participant's assumption that complete abstinence is the primary goal for harm reduction may not align with BHRC's focus on reducing harm and acknowledging the difficulties of addiction.

BHRC's harm reduction approach promotes a culture of acceptance, empathy, and understanding by acknowledging the complexities of addiction and providing nonjudgmental support. This approach fosters a safe and supportive environment, which is critical for building trust and promoting positive health outcomes among vulnerable populations. By accepting clients where they are in their recovery journey, BHRC's approach encourages engagement, retention, and ultimately, improved health outcomes, such as reduced substance use and improved mental health. The supportive environment facilitated by BHRC's approach can lead to increased client engagement, disclosure of needs, and progress towards positive change.

Stigma reduction

Most of the participants initially held stigmatising views of BHRC, especially its clients, perceiving them as dangerous and uncomfortable to be around due to their substance use history. However, through their involvement at BHRC, participants experienced a significant shift in attitudes. Over time, nearly all participants reported a transformation in their perceptions, moving from stigma to acceptance and humanisation of the center's clients. They came to recognise clients as individuals with inherent dignity and worth, rather than defining them based

on their substance use and lack of housing status. One participant revealed:

Seeing so many "Paras" in one place scared me when I first came here. I wondered if I was safe. After some time, I got used to them [clients]. They are good human beings who just made wrong choices somewhere in their lives like we all do. I have seen one or two who have really changed over the time I have been here.

Mnotho, a Student Social Worker aged 25.

During my first day at Bellhaven my impression about the place was that the place was unsafe as I was a little bit afraid as it was my first time being around so many drug users and recovering addicts.

Lindo, a male Student Social Worker aged 24.

This place looked a very busy place with paras in and out. I was scared at first to work with drug addicts due to my past trauma.

Amanda, a female Student Social Worker aged 27.

The above quotes reveal a transformative shift in perspective. The participants initially held preconceptions about people who use drugs, reflecting societal stigma. They even used a colloquial term (Paras) to refer to individuals struggling with substance use. Through exposure and experience at BHRC as a Student Social Workers, participants developed understanding and compassion. At the time of the study, they viewed clients as individuals with inherent dignity, rather than defining them by their struggles. The participants also acknowledged that clients were not inherently different, but rather, they had made choices, good or bad, just like everyone else. The experience and direct engagement with clients at BHRC helped the participants to overcome preconceptions and overcome their own biases.

Capacity building

Participants reported positive experiences with all BHRC staff. The staff at the centre were consistently described as welcoming, professional, and helpful. They reported that staff demonstrated exceptional guidance and support in servicing clients. They gained valuable experience working with diverse client populations with varying characters, personalities, disorders, and backgrounds. This experience was highly valued by all the participants, citing its potential future utility in their respective professional fields. Bhuti mentioned:

My relationship with the staff is entirely good, all the staff are extremely welcoming and willing to help and guide us. Everyone takes their work seriously and does what they need to do, while also maintaining a sense of humour and closeness. Ayo, a female volunteer aged 21.

The staff here are relatable, supportive and professional. They respect us as much as we respect them. We also have good communication between ourselves and about the patients that we see here. I have never had an issue with staff.

Bhuti, a male Homeopathy intern aged 25.

The people who work here are professional, friendly and healthy at the same time. They are always supportive to us.

Amanda, a Student Social Worker aged 27.

Participants reported positive experiences with BHRC staff, describing them as welcoming, professional, and helpful. The quotes from participants illustrate mutual respect between volunteers, student interns and staff, with participants feeling valued and supported. The participants' quotes also suggest that effective communication and collaboration existed between interns and staff, particularly regarding client care. Information from participants provides direct evidence of the positive relationships and collaborative environment at BHRC. Specifically, the quotes highlight the staff's professionalism, willingness to help, and respect for students and volunteers. The quotes demonstrate that BHRC fosters a conducive environment for students to learn and collaborate with staff, ultimately enhancing client care.

Additionally, a volunteer at the centre mentioned:

The centre is a place where I found my passion for social work and social upliftment. The birthplace of my desire to make a difference in the lives of others. The staff here are amazing. They are always welcoming and ready to answer any questions we have. Ayo, a female volunteer aged 21.

BHRC sparked the volunteer's passion for social work and social upliftment. The centre helped this volunteer to discover their desire to make a positive impact.

Some of the homeopathy students reported:

Bellhaven has been beneficial in my studies, it has taught me so much and improved my diagnostics, remedy knowledge, patient care and treating everyone patient the same but give each patient your undivided attention and help them according to their needs.

Bhuti, a male Homeopathy student aged 27.

We have improved in patient care, knowing different diagnosis when seeing Bellhaven patients. The centre helps us with practical aspects of knowing different diseases, it helps in knowing treatment (remedies) and it has also helped us with having good relationships with your patients.

Aza, a female Homeopathy student aged 26. As a Social Worker in training, I have learnt a lot of things here at Bellhaven about drug use and mental health issues related to drug users.

Lindo, a male Student Social Worker aged 24. I saw a lot of different acute and chronic cases in this place, physical and mental illnesses which helped me a lot on how to deal and handle patients differently.

Palesa, a female Homeopathy student aged 24.

The above quotes indicate that student interns valued BHRC for providing firsthand experience in their respective fields of study. The students' statements highlight the importance of interacting with clients in developing diagnostic skills. BHRC's client population presented a range of health concerns that exposed student interns to various cases. The students applied homeopathic and social work principles to real-world scenarios, enhancing their understanding. The students' experience suggests that homeopathy and social work contributes to addressing health issues in vulnerable populations.

Another participant added:

This place is an eye opener more than anything for me. It looks like a great research site. What this place does is not common in the country. Many people can learn a few things from this place.

Amanda, a female Student Social Worker aged 27.

The above participant viewed BHRC as a potential research site. The reasons included that BHRC's unique harm reduction strategies set it apart from the traditional rehabilitation recovery programs. This makes the BHRC investigative in exploring other effective strategies for addressing substance abuse.

A participant who initially felt challenged by BHRC clients' behaviour alluded:

Working in this place requires patience. The clients at this centre are different. Some of them are difficult to work with. I swear some of them press our buttons on purpose. If you are not patient, you might lose your temper and mess things up. So, I would say it is a good place for my character building. Mnotho, a Student Social Worker aged 25.

This quote from a Student Social Worker reveals valuable insights into their perceptions of BHRC clients and the challenges of serving them. The student intern acknowledged that some clients were difficult to work with, that they pushed boundaries, and tested their patience. He emphasised the need for patience when working with clients at a harm reduction centre, suggesting that

losing temper may compromise the effectiveness of harm reduction centre. The student viewed working at BHRC as an opportunity for character building, implying that the challenges helped them develop patience and self-control. The participant further recognised the value of working in a challenging environment for personal and professional growth. Their comment suggested that BHRC's harm reduction approach helped them to understand the complexities of addiction and the importance of patience and empathy. This finding highlights the potential for harm reduction settings like BHRC to challenge and reverse stigmatising attitudes, promoting empathy, and understanding towards marginalised populations. By creating a safe and supportive environment, BHRC fosters trust and rapport between clients and staff, encouraging non-judgmental and empathetic interactions that help break down stereotypes. Additionally, the centre's approach acknowledges the complexities of addiction, recognising that each client's journey is unique and deserves individualised support. This approach promotes a deeper understanding of marginalised populations and challenges stigmatising attitudes.

Reduce substance abuse-related harm

Participants, lacking prior exposure to harm reduction interventions, identified BHRC as their first introduction to this approach, which challenged their preconceived notions about rehabilitation centers that often emphasise abstinence-based approaches. In contrast, BHRC's harm reduction approach was perceived as empowering for clients, client-centered, and adaptable to individual client needs, promoting a sense of autonomy and self-efficacy. Participants recognised harm reduction as a lengthy, iterative process requiring mutual patience from both staff and clients and acknowledged the program's potential for fostering autonomy and self-efficacy among clients. This contrast between their initial perceptions and experiences at BHRC highlights the importance of exposing individuals to different approaches to substance abuse treatment, allowing them to understand the importance and benefits of harm reduction. One of the participants alluded:

When I first started, I doubted if this approach really worked. I did not get it. I am used to rehabilitation centres not harm reduction. But over time I realised that the program works. I think it takes time and dedication especially from the clients because I think it can be easy for them to relapse based on this environment. If I had the means, I would take the same idea to the area where I come from because I see the need for something like this.

Amanda, a Student Social Worker aged 27.

The participant's journey reveals a significant shift in their understanding and perception of harm reduction programs. Initially, they doubted the effectiveness of harm reduction approaches, likely due to their background in rehabilitation centers. However, through their experience with the BHRC program, they came to realise its potential, particularly when clients were dedicated to their recovery. The BHRC program's supportive environment, which encourages clients to take ownership of their recovery, appears to have fostered autonomy and self-efficacy among clients. By acknowledging the challenges clients face in maintaining progress, the program promotes a realistic understanding of the recovery process, empowering clients to make informed decisions about their care. As a result, the participant's skepticism gave way to advocacy, with a strong desire to implement a similar harm reduction program in their hometown. This transformation highlights the potential for harm reduction programs to inspire positive change in individuals and communities, challenging traditional views of substance abuse treatment.

A Homeopathy intern whose experience at BHRC was the first reported:

I can't say much about harm reduction as an intervention. I do not know much about it. I have to go and do my own research about it; however, these patients would not be here if it was not working. Mbongeni, a male Homeopathy student aged 26.

The participant recognised their own knowledge gap and is willing to learn. They further acknowledged lacking understanding of harm reduction as an intervention. Despite their limited knowledge on harm reduction programs, the participant observed that clients' presence at BHRC indicated that harm reduction was working implying that BHRC's services were beneficial, as clients continue to attend.

Discussion

This study explored the perceptions of community volunteers and student interns regarding harm reduction programs at BHRC. Program's structure and implementation processes at BHRC are designed to promote flexibility and adaptability, allowing clients to access services that meet their unique needs. The program's quality assurance mechanisms, such as regular client feedback and program evaluation, ensure that services are responsive to client needs and are delivered in a manner that is consistent with harm reduction principles.

The findings highlight four major themes from participants' perceptions and experiences at BHRC: the client-focused nature of the harm reduction interventions, their ability to reduce stigma and discrimination against

marginalised populations, their capacity-building nature, and ability to reduce substance abuse-related harm. Specifically, the study findings highlighted harm reduction centers as client-centered environments emphasising their welcoming and inclusive nature. This finding supports existing research that shows client-centered environments prioritise putting clients first, satisfying their needs, and treating them as individuals [31–33]. Participants specifically highlighted the center's unconditional acceptance, valuation, and respect for all clients from diverse backgrounds and cultures, aligning with the fundamental principles of harm reduction interventions [15].

Furthermore, the findings demonstrate the important role played by harm reduction interventions in reducing stigma against marginalised populations, including people experiencing homelessness and substance use. BHRC actively challenges and reverses stigmatising attitudes through various mechanisms and interventions. One key approach is the provision of education and training programs for community volunteers and student interns, which aim to increase awareness and understanding of substance use disorders and the needs of marginalised populations. These programs promote empathy and compassion, helping to break down stereotypes and stigmatising attitudes. Participants underwent a transformative shift, overcoming their preconceptions and biases, and moving from stigmatising to embracing and accepting individuals with substance abuse disorders. This transformation enabled participants to treat clients with dignity, highlighting the potential for harm reduction centers to serve as catalysts for social change. This finding aligns with existing literature that reports on the negative effects of stigma and discrimination on healthcare outcomes [34, 35].

In addition to reducing stigma, harm reduction centers play a crucial role in capacity-building for future health-care professionals, enhancing their professional skills and experiences. This aligns with existing literature describing training and capacity-building programs as core to the future development and improvement of health professionals [36, 37]. The findings have significant implications for healthcare education, highlighting the value of integrating harm reduction centers into training programs.

Moreover, the study highlights that harm reduction interventions are instrumental in mitigating substance use-related harm. Participants consistently reported that harm reduction programs empowered clients, fostering autonomy and self-efficacy. Observations of interactions between participants and clients confirmed this positive impact on positive behavior change, aligning with existing research demonstrating that harm reduction interventions enhance decision-making and goal-setting

skills, ultimately promoting healthier choices regarding substance use [38, 39].

The study further identified possible collaboration opportunities between BHRC and neighboring businesses, including the taxi industry. While this co-existence presents opportunities for social interactions and knowledge exchange [40, 41], it also raises concerns about potential distractions and competing interests. Research shows that shared space experiences can encourage social interactions, facilitating knowledge and idea exchanges among occupants, potentially leading to innovative solutions, enhanced creativity, and improved problem-solving capacities [42]. However, some participants expressed concerns about the busy location and potential distractions, highlighting the need for strategies to mitigate these challenges.

By providing a detailed understanding of BHRC program's structure, implementation processes, and quality assurance mechanisms, this study offers valuable insights into how specialised support is operationalised and maintained. The findings have significant implications for the development and implementation of harm reduction programs, highlighting the importance of client-centered care, multidisciplinary teams, and ongoing quality assurance. Despite the study's limitations, including a small sample size and limited geographic scope, it contributes to the understanding of harm reduction programs in South Africa. Future research directions should replicate this study with larger and more diverse samples, examining the impact of harm reduction programs on social determinants of health and exploring strategies for effective collaboration and community engagement.

Implications and limitations

The findings of this study have significant policy implications for the development and implementation of harm reduction programs. Specifically, they highlight the importance of integrating harm reduction centers into healthcare training programs, client-centered care, multidisciplinary teams, and ongoing quality assurance mechanisms. Harm reduction interventions can also reduce stigma against marginalised populations, informing policies addressing social determinants of health. Collaboration between harm reduction centers and neighbouring businesses presents opportunities for innovative community engagement strategies. These insights can inform policy decisions related to funding, program development, and community-based initiatives.

While this study contributes to the understanding of harm reduction programs in South Africa, addressing a significant knowledge gap, we acknowledge limitations. The small sample size and single-site design may limit generalisability and transferability. Future research should replicate this study with larger, more diverse

samples, examining the impact of harm reduction programs on social determinants of health and exploring effective collaboration and community engagement strategies. Specifically, research could investigate effectiveness in different urban contexts, impact on sub-populations, and develop education programs to reduce stigma. By acknowledging limitations and providing recommendations, we aim to enhance the credibility and utility of our research.

Conclusion

This study demonstrates the value of harm reduction programs in addressing substance use challenges in South Africa. The findings highlight the importance of clientcentered care, capacity building, and stigma reduction in harm reduction interventions. BHRC's harm reduction approach provides a valuable model for addressing substance use challenges in resource-constrained environments. The study's results have significant implications for policy and practice, emphasising the need for ongoing quality assurance and community engagement. Future research should focus on replicating this study in different contexts and exploring strategies for effective collaboration and community engagement. By investing in harm reduction programs, policymakers and practitioners can improve health outcomes and reduce substancerelated harm among vulnerable populations.

Abbreviations

BHRC Bellhaven Harm Reduction Centre

HIV/AIDS Human Immunodeficiency Virus/ Acquired Immunodeficiency

Syndrome

IREC Institutional Research Ethics Committee

LMIC Low- and Middle-Income Countries

OAT Opiod Agonist

OST Opioid Substitution Therapy
SUD Substance Use Disorders

TB Tuberculosis

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Author contributions

N.P.T. conceptualized the study, directed data collection processes and conducted data analysis. J.D.P. supervised the study processes. N.P.T. and J.D.P. validated the findings and participated in the interpretation. N.P.T. drafted the manuscript and both N.P.T. and J.D.P. conducted the critical review of the manuscript for intellectual content. Both authors read and approved the final version of this manuscript.

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Data availability

No datasets were generated or analysed during the current study.

Declarations

Ethical approval

This study was approved by the Durban University of Technology Ethics Review Committee (IREC 049/15).

Consent to participate

All participants provided written and verbal informed consent, and pseudonyms were used to ensure anonymity and confidentiality.

Consent for publication

This study does not contain any individual person's data in any form of personal details, images or videos. However, BHRC and our study participants gave us their consent to publish this study.

Permission

Permission was obtained from BHRC management.

Competing interests

The authors declare no competing interests.

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