'If I die, I die, I don't care about my health'

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'If I die, I die, I don't care about my health': perspectives on self-care of people experiencing homelessness.

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'If I die, I die, I don't care about my health': perspectives on self-care of people experiencing homelessness.

Abstract:

Self-care, which refers to what people do to prevent disease and maintain good health, can alleviate negative health consequences of people experiencing homelessness. The aim of the study was to apply a theoretically informed approach in exploring engagement of people experiencing homelessness in self-care and to identify factors that can be targeted in future health and social care interventions. Qualitative semi-structured interviews were conducted with 28 participants opportunistically recruited from a specialist homelessness healthcare centre (SHHC) of North East Scotland, United Kingdom (UK). An interview schedule was developed based on the theoretical domains framework (TDF). Interviews were audio-recorded and transcribed verbatim. Six aspects of self-care were explored including (i) self-awareness of physical and mental health, (ii) health literacy including health seeking behaviour, (iii) healthy eating, (iv) risk avoidance or mitigation, (v) physical activity and sleep, and (vi) maintaining personal hygiene. Thematic analysis was conducted by two independent researchers following the Framework Approach. Participants described low engagement in self-care. Most barriers to engagement in self-care related to TDF domain 'environmental context and resources'. Participants often resorted to stealing or begging for food. Many perceived having low health literacy to interpret health related information. Visits to churches and charities to get a shower or to obtain free meals were commonplace. Participants expressed pessimism that there was 'nothing' they could do to improve their health and described perceived barriers often too big for them to overcome. Alienation, lack of social support, and the perception that they had done irreversible damage to their health prevented their involvement in self-care. The theme of 'social circle' held examples of both enabler and barriers in participants' uptake of risky

behaviours. Health and social services should work with persons experiencing homelessness in designing and delivering targeted interventions that address contextual barriers, multi-morbidity, health literacy and self-efficacy.

Keywords: Self-care, Homelessness, Health Behaviours

What is known about this topic?

- Ill health is a potential cause and consequence of homelessness but self-care can prevent and mitigate ill health
- A need to better understand self-care needs of people experiencing homelessness has recently been emphasised in health and social care policies across the UK
- There is a dearth of research exploring wider aspects of self-care amongst people experiencing homelessness as previous research has considered nutrition and diet, and risky behaviours in isolation.

What this paper adds?

- Study participants experiencing homelessness indicated low engagement in self-care across various domains such as diet, physical and mental health
- Low engagement in self-care was linked to a lack of resources, multi-morbidity, low health literacy and social influences
- Targeted interventions that address contextual barriers, multi-morbidity, health literacy and self-efficacy can improve participation in self-care

Introduction

In the United Kingdom (UK), people are considered homeless if they no longer have a legal right to occupy their accommodation or if it would no longer be reasonable (e.g. due to safety concerns) to continue living there (GOV.UK, 2015). As such, homelessness takes many forms including sleeping rough, living in derelict buildings, residing in temporary shelters, living in squats or sofa surfing (Homeless link, 2016). Homelessness is on the rise across urban areas of the Western World including the home countries of the UK (Scotland, England, Wales and Northern Ireland) and has been linked to economic austerity. In 2018, nearly twice as many people slept rough on any given night in England compared to 2010 (Homeless link, 2017; GOV.UK 2018). In Scotland, over 34,000 people made homelessness applications to their local authority in 2016-17 requesting accommodation (Scottish Public Health Observatory, 2018).

People experiencing homelessness face significant disadvantages in attaining and maintaining a healthy lifestyle (Baggett *et al.* 2013; Aldridge *et al.* 2017; University of Sheffield, 2012; Fazel *et al.* 2014). They do, therefore, experience poor health outcomes with a prevalence of mental health illness, alcohol and drug misuse, and communicable diseases higher than in the general population. Opioid poisoning, heart failure, infectious diseases, and external causes such as accidents, often contribute to the higher rate of mortality amongst street dwellers (Hwang *et al.* 2005).[10] Those occupying homeless shelters are also known to die at an earlier age than the general population, with the average age of death being 47 years (Hassanally *et al.* 2018).

Amongst multiple forms of homelessness, rough sleeping pre-disposes individuals to much vulnerability. Government policies in the UK aim to tackle rough sleeping through devolved administrations allowing England, Scotland, Wales and Northern Ireland to develop their own legislations and strategies in preventing and

managing rough sleeping. In England, rough sleeping strategy was published in 2018 (Gov.UK, 2018) which aims to eliminate homelessness by 2027 by increasing bed spaces in city council accommodations, increasing access to substance misuse and mental health treatment and promoting joined-up care across sectors. 'Housing first' is one of the key interventions to supporting this strategy. Housing First aims to provide 'a stable, independent home and intensive personalised support and case management to homeless people with multiple and complex needs'. It aims to recognise housing as a matter of right than a reward (Homelessness Link, 2016). Further funding to tackle rough sleeping has been allocated by targeting areas with high proportion of rough sleeping in England. Such funding is allocated to offer dedicated support teams and securing additional bed spaces for people experiencing homelessness (Gov.UK, 2018). Other policy interventions to prevent rough sleeping includes Scottish Government's abolition of the priority needs assessment when offering accommodation to persons experiencing homelessness, entitling anyone finding themselves homelessness to settled accommodation and not just to families with children as was the case prior to the Act (The Scottish Government, 2012). 'Ending homelessness and rough sleeping: action plan' published by the Scottish government in 2018 aims to also tackle homelessness by tackling the root causes including additional support to people with adverse childhood experiences, and developing adversity and trauma informed workforce (The Scottish Government, 2018).

Addressing health inequalities requires a specific focus on the disadvantaged population. In particular, preventative services are known to be effective in alleviating the health impact of homelessness. Self-care, as defined by the World Health Organisation, is the ability of individuals, families and communities to promote health, prevent disease, maintain health, and to cope with illness and disability with or without the support of a healthcare provider (WHO, 2013), has been shown to prevent and mitigate ill health including long term illnesses. The

principles of self-care which can be applied to prevention and management of ill health are known to have arisen from a number of theoretical models such as the theory of self-regulation. Self-regulation models emphasise the importance of self-efficacy (Bandura, 2005), which relates to an individual's belief in their ability to learn and perform specific behaviours; and self-management (Lorig and Holman, 2003) which relates to adoption into practice of such behaviours. Self-efficacy often reinforces self-management. Self-management strategies, including patient-led self-care support groups, have also been shown to improve clinical outcomes amongst patients in a variety of long term illnesses (Minet *et al.* 2010), including effects on mortality, hospitalisation and quality of life (Ditewig *et al.* 2010). Supporting self-care can increase patient satisfaction of health and social care services, and enables greater integration of health and social care. In the UK, self-care features in the National Health Services plan as one of the key building blocks for a patient-centred health service (Department of Health, 2018). It is important however to understand that within the spectrum of patient care, most care is shared care involving primary, secondary or tertiary health care and social care, and can involve a small or large components of self-care (Department of Health, 2005). In chronic and debilitating health conditions, people's participation in self-care is often minimal, whereas self-care occupies greater share in management of acute and non-debilitating conditions. Self-care practice is also dependent on context-specific factors including available resources and individuals hence should not be blamed for non-participation in self-care.

The seven pillars of self-care provide a framework to consider a wide range of activities relevant from the self-carer perspectives (International Self Care Foundation, 2018) (table 1). These include awareness of physical and mental health, health literacy and health seeking behaviour, healthy eating, hygiene, physical activity and sleep, and risk avoidance. The seven pillars of self-care framework, proposed by the International Self Care Foundations postulates that

unhealthy behaviours such as smoking, excess consumption of alcohol, poor diet and insufficient exercise often tend to cluster together (International Self Care Foundations, 2018). Similarly, healthy behaviours in the seven pillars also cluster together. Therefore, promoting one healthy behaviour may motivate individuals to uptake other healthy behaviours. We have previously used the seven pillars framework to identify appropriate interventions to promote self-care in offshore workers (Smith *et al*. 2018, Gibson Smith *et al*. 2018a).

Table 1 to appear here

Ill health is a potential cause and consequence of homelessness. A need to better understand supporting self-care and self-management for people experiencing homelessness, have recently been emphasised (The Queen's Nursing Institute, 2016). There is a dearth of research exploring wider aspects of self-care amongst people experiencing homelessness as previous research has looked at aspects such as nutrition and diet (Seale *et al.* 2016), risky behaviours (Roerecke *et al.* 2013), and health information seeking (McInnes *et al.* 2013) in isolation.

The aim of this study was to apply a theoretically informed approach in exploring engagement of people experiencing homelessness in undertaking self-care and to identify associated barriers that can be targeted in future health and social care interventions to promote self-care.

Method

Qualitative semi-structured, face-to-face, interviews were conducted with patients registered with an SHHC in North East of Scotland, UK between October 2015 and January 2016. This facility provides services to a patient population of approximately 400, of whom approximately 50% are on methadone therapy. Patients aged 18 years and over, presenting for the consultation during the data

collection days and those referred by the SHHC staff, were invited to participate. An effort was made to achieve variation in age and sex of the study participants. Researchers on site, who operated in pairs, provided further information about the research. Signed, informed consent was obtained by the researchers prior to interview commencement.

An interview schedule was developed based on the research aim, experience of the research team, available literature, and the Theoretical Domains Framework (TDF) (Cane *et al.* 2012; Francis *et al.* 2012). TDF is a framework consisting of 33 behavioural theories incorporated into 14 domains which allows researchers to identify barriers, facilitators or determinants of a particular behaviour. These include environmental context and resources, knowledge, skills, intentions, goals and behavioural regulations (table 2). TDF has been used extensively in qualitative studies to identify target behaviours for future interventions and to characterise implementation problems (Cane *et al. 2012;* Atkins *et al.* 2017). The researchers have previously used TDF in qualitative studies in identifying barriers of: access to primary healthcare by persons experiencing homeless (Gunner *et al. 2019*) and effective transition of care of such persons across services (Gibson-Smith *et al.* 2018b). When using TDF, it is imperative that the framework is used from the outset, including the development of an interview schedule, as the use of TDF at later stages of the research provides challenges in mapping the data against TDF domains (Cane *et al. 2012;* Atkins *et al. 2017*).

The interview schedule was reviewed for credibility by the research team, including a general practitioner (GP) and a nurse practitioner based at SHHC, a GP practice support pharmacist, a community pharmacist and academic health services researchers. Six pillars of self-care were explored (table 1). The seventh pillar of self-care 'rational and responsible use of medicines and products' was explored in another study (Paudyal *et al.* 2017).

Table 2 to appear here

The interview schedule was piloted amongst four participants. No change in the interview schedule was needed hence the pilot transcripts were analysed together with the main study transcripts. Interviews lasted a maximum of 30 minutes, with trained researchers, were audio-recorded and transcribed verbatim. Participants were recruited until data saturation was achieved, when no new themes emerge, as realised by the researchers during transcription and preliminary analysis of the data. Saturation was assumed based on the repetition of the themes from the subsequent interviews in the context of available data (Saunders *et al.* 2018).

The Framework Analysis technique (Ritchie *et al.* 2003) was used to guide the analytical process. The data pertaining to each pillar of self-care were coded into a matrix design based on the TDF (table 2). A framework was developed for each of the six pillars of self-care behaviours. Data relevant to these behaviours were mapped to the TDF domains and relevant themes under each domain were listed.

Researchers (VP, KM and DS) met to discuss initial coding after analysing the first four transcripts. Duplicate, independent checking of the transcripts and analysis was undertaken. Six undergraduate pharmacy students, including two visiting students, conducted duplicate independent analysis of the transcripts based on the coding.

Ethical and governance (R&D) approval for the study was granted by NHS East Midlands Committee (15/EM/0404) and NHS Grampian (2015RG005) respectively.

Results

Twenty-eight patients were interviewed, the majority of whom were male (n=21) with drug misuse being the key reason leading to homelessness (n=17) (table 3). The mean age was 42 years (range: 25-67 years). Most participants had faced homelessness for between six months and four years (n=17) (table 3).

Table 3 to appear here

Results from the thematic analysis are described below under each pillar of self-care. Narratives are presented alongside illustrative quotes in this section. The results are then mapped against TDF domains to relate the factors and barriers in relation to participant engagement with each pillar of self-care (table 4).

Self-awareness of physical and mental health

Most participants demonstrated knowledge and awareness of their health conditions and the impact of homelessness had on the onset and severity of their illnesses. Health conditions such as mental illness including drug and alcohol misuse, infections, ulcers, asthma, back pain and fatigue were commonly experienced as expressed by participants during the interviews. Participants described their capabilities and motivation to adopt better physical and mental health were compromised due to a lack of stable accommodation. Participants described feeling 'useless' and having suicidal ideation.

> 'I tried to kill myself about 5 times. It [homelessness] kicked your self-esteem to death.' 40 year old male

Most participants mentioned that they didn't attempt to change anything about their health while facing homelessness as health was not high amongst the list of priorities given the adversities they were facing.

> 'You care about your drugs, and at the time you think if you (I) die, you (I) die,… you (I) don't care about your health…it doesn't matter, that's what you thought. It's a dark place to be.' 34 year old male

Participants also mentioned having experienced a lot of stigma and discrimination in society which negatively impacted their physical and mental well-being.

> '…it (homelessness) affects you. People think you are a flaming drug addict, scumbag, all they think ken [sic *know*], look at this mink, ken, sitting begging, get a job, ken. It's nae good, you feel like snapping, and punching the *** out of folk, but you cannae can you. You have got to hold yourself back. Especially on a Saturday night…: '…I've been asked, like by a couple of guys, gay men for sex, ken. Its nae good, they think you're homeless, they think you will do anything for money, ken cause you are begging, ken.' 36 year old male

Healthy eating

Most participants described having adequate knowledge on the importance of healthy meals to maintain good health. However, most reported poor access to healthy meals due to lack of resources. One participant described experiences of surviving on chocolates for several weeks. For a few participants, drugs or alcohol would take precedence over food. Lack of appropriate space to prepare and cook meals was commonly mentioned as a barrier. Visits to churches and charities for free meals and accessing cheaper food sources, such as fast food chains, were commonplace behaviours. Participants often had to rely on food given by those passing by when sleeping rough.

> 'When you're sitting on the street folk would give you a coke and a sandwich or something, sometimes I would have four, or five or six sandwiches that I would go through but the nutritional (value) is low, so you, you lose a lot, your weight just

> falls off you... Just nae eating right and taking drugs and alcohol it's just, the weight just falls off you.' 34 year old male

One participant described the extreme experience of hunger lasting several days where he had no other option than to steal food from a retailer.

> 'Ehm, basically I never ate for days, and then it would get to the point that I would get so hungry that I would need to steal a sandwich or something out a shop.'39 year old male

Table 4 to appear here

Health literacy and seeking health information

Some participants described experiences of actively seeking health information from their health and social care professionals for a diverse range of health issues including substance misuse. Participants demonstrated awareness of where to seek health information, with the preferred source of information being GPs and nurses at the SHHC and social service counsellors. Participants who had very recently moved to temporary accommodation also mentioned use of the internet to seek health information. However, most participants identified themselves as having low literacy skills and often not being able to interpret health information.

> 'I've looked up the internet [about health condition] a couple of times but I don't understand it.' 43 year old Male

Some participants expressed feeling emotional in relation to discussing their health with their healthcare professionals. This was due to their health being closely linked to the life circumstances they were facing and being uncomfortable discussing such issues with other people.

'I just don't like new people [healthcare professionals]. I just don't like having to kinda having to repeat everything. I get myself in a muddle and I get all stressed out.' 33 year old female

Personal Hygiene

Maintaining good personal hygiene was a priority for some participants. Those who demonstrated motivation and intentions to remain free from substance misuse mentioned that there was no excuse for not maintaining personal hygiene even when sleeping rough. Some mentioned being advised by charities regarding where to go on a daily basis for a shower. Others would pop in to friends' houses, railway stations, and fast food restaurants to get a 'wash'. Some participants described experiencing insecurity in public clean up facilities which prevented them from using them on a regular basis.

'We've had to go to McDonalds to have a wash and stuff like that, there is, you will find places, ken fit [sic *know what*] I mean. There is no excuse to be sitting in some state some people are in. OK, your clothes are getting ripped cause you are sitting on pavements all day and stuff like that, ken, you are going to look a mess, doesn't mean that you have got to be stinking, a stinking mess, you know. But it is hard.' 47 year old female

Other participants described that maintaining good hygiene was challenging due to other life priorities and getting housed in stable accommodation was the only way to maintain good personal hygiene. Therefore some participants were not being personally motivated to wash or dress themselves properly even when they had options and facilities available. Participants expressed emotions when mentioning accounts of being stigmatised because of their poor personal hygiene.

'...you don't care about long hair, if it's greasy, you don't care if you walk onto a bus and everybody walks off the bus 'cause you smell.' 34 year old male

Risk avoidance or mitigation

Most participants admitted to their current or past use of illicit drugs, hazardous drinking of alcohol, and smoking habits. Most participants who admitted substance misuse also mentioned being on opioid replacement therapy (ORT). Social influences were described as key to participants choosing to adopt or give up risky behaviours. However, some participants described lack of self-regulation and behavioural control in helping them to come off the substances. Some also described alcohol and substance misuse as a coping mechanism.

> 'Never succeeded, I've tried to give it [alcohol and drug misuse] up but think it's the only thing that keeps my nerves tied together just now so, but just, I think I've done too much damage to repair it anyway so If I'm going to die now, I'm gonna die. I've made my choices, so I've made my bed I'll have to lie in it, sorta thing. That's about it.' 39 year old male

Participants described going to extremes to obtain money for illicit substances including robbery and prostitution. Some participants described accounts of successfully giving up risky behaviours such as substance and alcohol misuse.

> 'When I was on drugs and [I felt] that…if I died one day, I died and then well my life was… when you're on drugs, you see [drugs] making these people die around you. I've been lying in a bed and the boy next to me was dead. It's just, oh well, I'd go into his pockets and take his money and drugs and walk out the house. Aye, that's the way you are. It's a weird, it's a horrible thing drugs. It does it to you, ken [sic *know*], heroin.' 54 year old male

> 'I've been totally clean off everything for just over a year in April.. I ended up being in mental health hospital for almost three months. That was like an extended rehab sorta thing, so I like stayed away from everything for 3 months which gave

me a fighting chance and I've been clean ever since then. Think I've had one drink in last New Year since then.' 39 year old male

Physical activity and sleep

Most participants mentioned engagement in physical activity was beyond their list of priorities. Morbidity, disability or lack of accommodation preventing them taking up physical activities. A few participants expressed disinterest and lack of motivation in engaging in the discussion about aspects of physical activity during the interviews and such lack of self-efficacy was linked to adverse life circumstances.

'No I've no done nothing (physical exercise) – just nothing at all. Just can't get motivated. That's how I'm waiting to see the psychiatrist and to get on my anxiety. 'Cause I couldn't even come down here. Couldn't leave the house or and that's what made us depressed 'cause I like just going right out, ken getting up and going out. I couldn't get out on my own. 34 year old female

Some participants living in temporary, council offered accommodation described the use of a gym or walking to maintain health. Many described having very little or no sleep while facing homelessness. Lack of stable accommodation was a key barrier to attaining quality sleep. Some mentioned using illicit substances to enable better sleep. Participants described stigma, theft and violence while sleeping rough.

'… you're sleeping in car parks and everything, freezing cold, …so you don't get to sleep ken [sic *know*] and folk say, "oh you should come to mines if you're ever stuck", but you never bother, ken, because you knock on somebody's door in the middle of the night they're hardly happy to see you but, eh aye, it was an absolute nightmare because there was no churches letting people in or anything.' 49 year old female

Discussion and conclusion

This study has explored homeless from the participants' perspectives on wider aspects of self-care through the use of theory. Engagement in self-care was perceived to be low across several pillars of self-care theory including healthy eating, health information seeking, maintenance of personal hygiene, risk avoidance and mitigation, and maintenance of personal hygiene mainly due to context, resource specific barriers and lack of self-efficacy due to poor perceived health and adverse life circumstances. The use of TDF allowed the barriers and facilitators of participant engagement in self-care to be mapped across domains that could be targeted in future interventions. Most of the barriers related to non-engagement in self-care identified in this study centred on the 'environmental context and resources' domain of TDF and this included lack of stable accommodation. Participants often expressed lack of motivation to uptake healthy behaviours, often compromised by other life priorities.

In this study, participants alluded to the role of charities and social support in enabling them to undertake self-care such as in enabling a healthy diet or maintaining personal hygiene. There is scope for health and social care professionals to offer such provision at the health or social care centres or to make referrals to services. Emphasis has been placed on healthcare professionals to recognise and screen for nutritional need of people experiencing homelessness and their families (The Queen's Nursing Institute, 2016). Participants in this study expressed low health literacy and hence health and social care professionals need to be aware of these barriers when referring people experiencing homelessness to sources of information. Participants described being emotionally vulnerable when discussing their health and self-care issues with the healthcare professionals because issues were closely linked to their life circumstances. Our previous study identified that rapport with health and social care workers was a key factor in

homeless people's preference to use SHHC facilities, even when they had relocated to permanent accommodation (Paudyal *et al.* 2018).

Most of the barriers to the uptake of self-care including healthy eating and physical activity were linked by participants of this study to their lack of accommodation. In England, the Homeless Reduction Act is coming into effect in 2018 (Paudyal and Saunders, 2018) following a similar homelessness legislation in Wales in 2014 (The Welsh government, 2014). While the effectiveness of this Act is yet to be evaluated, the Act mandates health and social care services to refer people who are at risk of or facing homelessness to local authorities for the provision of accommodation. Policy interventions such as The Housing First initiative (Homeless Link, 2016) are likely to address context and resource related barriers. Research evidence demonstrates that Housing First initiative decreases homelessness and increases housing retention rates and decreases the use of emergency health services, and emergency shelters, particularly in people with severe mental health and substance misuse problems (Woodhall-Melnik and Dunn, 2018). Screening people experiencing homelessness for mental and physical health conditions during their housing needs assessment provides an effective strategy for early intervention (Weinstein *et al*. 2013).

There is a lack of previous literature exploring wider aspects of self-care within a population of people experiencing homelessness as the literature often tends to focus on a single behaviour at a time. Therefore, only a limited comparison to previous literature could be undertaken. A recent study in the United States showed that poorer self-rated health was associated with the desire to reduce hazardous drinking and increase fruit and vegetable consumption in this population (Taylor *et al*. 2016). A recent review of the literature demonstrated evidence of malnutrition including saturated fat, low fruit and vegetable intake and numerous micro-nutrient deficiencies, amongst people experiencing

homelessness, often leading to physical and mental health consequences (Sprake *et al*. 2014). Furthermore, that review noted the search for food often takes priority over healthcare and access to medicines (Paudyal *et al*. 2017).

Strengths and limitations

This study is, to the best of our knowledge, the first to explore people experiencing homelessness' perspectives on wider self-care aspects. Duplicate and independent analysis of the data enabled trustworthiness of the findings. Use of theory enabled mapping of the key barriers and facilitators of engagement in self-care across domains of the TDF, the pillars of self-care and provides specific targets for future interventions.

This study has some limitations. Some participants of this study had recently been temporarily or permanently housed despite the use of the SHHC and were waiting to relocate to mainstream general practices. Such participants provided their retrospective accounts. The study participants were predominantly male, however, this reflects the data trend of persons experiencing homelessness. Only the patients with good rapport with the healthcare staff were included. This approach was used to ensure the safety of both the researchers and research participants. Therefore, views may not be representative of all participants from the study setting. In addition, the researchers used the transcripts and initial analysis when assuming data saturation. As reported in the literature, this is a common barrier to ascertaining saturation in qualitative studies (Saunders *et al.* 2018).

Practice and research implications

The results of this study suggest that promotion of self-care amongst people experiencing homelessness requires addressing the resource-related barriers such as provision of stable accommodation and their co-morbidities. Such barriers

collectively compromises their self-efficacy and motivation to uptake self-care. In addition, the results provide recommendations for the development, implementation and evaluation of health and social care interventions that can positively impact on their self-confidence, belief about capabilities, intentions and behavioural regulations. The Medical Research Council, UK provides a framework (Craig *et al.* 2013) for development of complex interventions. This study provides targeted areas for multi-faceted interventions and the data provides a valuable foundation on which to base development of interventions. It has been postulated that unhealthy behaviours, such as poor diet, drugs and alcohol misuse, tend to "cluster" together in individuals (International Self Care Foundations, 2018), so as the healthy behaviours cluster amongst certain sectors of the population. Such multi-faceted targeted interventions can be delivered at temporary accommodations, charities, outreach services, or health and social care settings that can enable homeless population to develop their self-confidence, improve health seeking behaviour and their intentions to lead a healthy lifestyle. People sleeping rough will also benefit from provision of healthy diet, tailored health related information, facilities for personal hygiene under one roof.

Poor mental health including the experience of stigma and discrimination was a recurrent theme in the data. Poor mental health can often be the cause and consequences of homelessness (Bowen *et al. 2019*). Various barriers to people's access to mental health services have been described in the literature with concurrent substance misuse and history of self-harm often excluding patients access to mental health services (Gunner *et al. 2019*). Hence, people experiencing homelessness may benefit from multi-morbidity models of case management, and these are best embedded as part of housing-related interventions such as the Housing First initiative (Aubry *et al. 2015*). The Assertive Community Treatment (ACT) is one example where multi-morbidity including mental health and substance misuse is managed by a multidisciplinary

team with home based treatment and out of hours availability by also integrating peer support (Nugter *et al*. 2016). Stigma and discrimination were also commonly cited in relation to societal attitude towards homelessness and people experiencing homelessness. However, previous research showed that people experiencing homelessness also face stigma and discrimination when accessing health services (Paudyal *et al. 2018;* Gunner *et al. 2019*). Anti-stigma interventions for healthcare professionals such as the 'targeting the roots of healthcare provider stigma' which involves improving the ability of healthcare professionals to cope with the feelings and emotions when working with vulnerable patients; improving their competence and the confidence of staff; and addressing the lack of awareness of one's own prejudices have been shown to minimise perceived stigma and discrimination (Knaak and Patten, 2016). In addition, health and social care workers are able to better support people experiencing homelessness when they have the knowledge of patients' backgrounds and life circumstances (Padget and Henwood, 2012).

While health professionals based in specialist homelessness healthcare facilities may be more aware of the factors associated with non-engagement of people experiencing homelessness in self-care, as identified in this study, many homeless patients use mainstream services or may not come in contact with healthcare staff. Wider awareness will enable health promotion and self-care improvement in this population. Health and social services should avoid blaming individuals for their behaviours and low perceived engagement in self-care as often many of these barriers including context and societal factors need system based approach for change.

Conclusion

Low engagement in self-care was noted amongst the study participants. There is scope for targeted interventions focused on specific determinants to promote

each pillar of self-care by addressing contextual barriers, physical and mental co-morbidities, health literacy and people's self-efficacy. Health and social services should work with persons experiencing homelessness in designing and delivering targeted interventions.

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765 **Table 1: Pillars of self-care**

Pillars of Self-care	Example of topic guide prompts based on TDF
Self-awareness of physical and mental condition and use of health services	Awareness about their health and illness, use of healthcare services
Healthy eating	Seeking and consuming healthy food and balanced diet
Health literacy and seeking health related information	Whether participants actively seek health related information, ability to access and interpret information
Good hygiene	Maintenance of personal hygiene and associated barriers and facilitators
Physical activity and sleep	Physical activity levels, associated barriers and facilitators
Risk avoidance or mitigation	Substance misuse including drugs, alcohol and illicit substances
Rational and responsible use of medicines, services and products	Using medicines, services and products responsibly when necessary

766 Source: International Self Care Foundation (2018)

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769 **Table 2: Theoretical domains framework (TDF)**

TDF domains and descriptions
1. Knowledge Knowledge of condition /scientific rationale, Procedural knowledge, Knowledge of task environment
2. Skills Skills, skill development, Competence, Ability, Interpersonal skills, Practice Skill assessment
3. Social/ Professional Role and Identity Professional identity, Professional role, Social identity, Identity, Professional boundaries, Professional confidence Group identity, Leadership, Organisational commitment
4. Beliefs about Capabilities Self-confidence, Self-confidence Perceived competence Self-efficacy Perceived behavioural control Beliefs Self-esteem Empowerment Professional confidence
5. Optimism Optimism Pessimism Unrealistic optimism, Identity
6. Beliefs about Consequences Outcome expectancies, beliefs, anticipated regret, consequents
7. Reinforcement Incentives, Rewards (proximal/distal, valued/not valued, probable/improbable), Incentives, Punishment, Consequents, Reinforcement, Contingencies, Sanctions
8. Intentions Stability of intentions, Stages of change model, Trans. model/stages of change
9. Goals Goals (distal/proximal), Goal priority, Goal / target setting, Goals (autonomous/controlled), Action planning Implementation intention
10. Memory, Attention and Decision Processes Memory, attention, decision making, cognitive overload, tiredness
11. Environmental Context and Resources Environmental stressors, Resources / material resources, Barriers and facilitators, Organisational culture /climate Person x environment interaction, Salient events / critical incidents
12. Social influences Social pressure, Social norms, Group conformity, Social comparisons, Group norms, Social support, Intergroup, conflict, Power, Group identity, Alienation, Modelling
13. Emotion Anxiety, Fear, Affect, Stress, Depression, Positive / negative affect, Burn-out,
14. Behavioural Regulation Self-monitoring, Breaking habit, Action planning

770 Adapted from Cane *et al.* 2012, Atkins *et al.* 2017

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772 **Table 3: Participant demography**
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	Demographic Data	Number of Participants (%)
Sex (n=28)	Male	21 (75.0)
	Female	7 (25.0)
Age (n=28)	25-35 years old	9 (32.1)
	36-45 years old	10 (35.7)
	46-67 years old	9 (32.1)
Highest Level of Education (n=28)	Left school before 16	6 21.4)
	Left school with GCSE/CSE/O-Level/Standard Grade or equivalent	14 (50.0)
	Left school with A-Level/Higher or equivalent	4 (14.3)
	University degree	1 (3.6)
	Other	3 (10.7)
Marital Status (n=28)	Single	16 (57.1)
	Divorced or separated	2 (7.1)
	Widowed	2 (7.1)
	Living with a partner (co-habiting)	6 (21.4)
	In a long term relationship	2 (7.1)
Where do you normally sleep? (n=28)	Hostel	5 (17.9)
	Council, housing association	11 39.3)
	Sleeping rough	2 (7.1)
	Other such as with friends or relatives, B&B, Caravan	5 (17.9)
	Privately rented or owned accommodation	3 (10.7)
	Other	2 (7.1 (bedsit & shared house)
Where do you normally obtain daily essentials?* (n=27)	Mostly buys own food	20 (71.4)
	Churches	4 (14.3)
	Charity shelters or hostels	4 (14.3)
	Friends or relatives	5 (17.9)
	Begging	1 (3.6)
	Other	5 (17.9)
How did you become homeless?* (n=28)	Alcohol misuse	3 10.7)
	Drug misuse	17 (60.7)
	Gambling	2 (7.1)
	Abusive situation	310.7)
	Relationship breakdown	7 (25.0)
	Injury	0 (0.0)
	Loss of Job	2 (7.1)
	Mental Illness	8 (28.6)
	Other	9 (32.1)
How long have you been homeless for? (n=28)	Less than 6 months	5 (17.9)
	6 months to a year	8 (28.6)
	1-2 years	6 (21.4)
	3-4 years	3 (10.7)
	5 or more years	6 (21.4)
How old were you when you first became homeless? (n=27)	Younger than 20 years old	8 (28.6)
	Between 20 – 30 years old	6 (21.4)
	Older than 30 years old	13 (46.4)
Responsible for any children? (n=28)	Yes	7 (25.0)
	No	21 (75.0)
Employment Status (n=28)	Unemployed and currently not looking for work	20 (71.4)
	Unemployed and currently looking for work	4 (14.3)
	Unemployed and student	1 (3.6)
	Employed full time	2 (7.1
	Employed part time	0 (0.0)
	Retired	1 (3.6)
How would you describe your general health? (n=28)	Very good	1 (3.6)
	Good	4 (14.3)
	Fair	9 (32.1)
	Bad	12 (42.9)
	Very bad	2 (7.1)

774 *multiple choices were allowed

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776 **Table 4: Results of framework analysis**
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TDF[18,19] domains	Self-awareness of physical and mental health	Healthy eating	Health literacy (Health information seeking behaviour)	Personal hygiene	Risk avoidance Rational and responsible use of products, services, diagnostics and medicines	Physical activity and rest (sleep)
1. **Knowledge**	Knowledge of personal health conditions, knowledge of the impact of homelessness on health	Knowledge (or lack of) about nutritional values of food; knowledge of the role of good food on health	Knowledge (or lack of) where to seek health information	Knowledge about facilities available in the locality for a wash	Knowledge of drug misuse about negative impact on health	Knowledge on the importance of physical activity or quality sleep to health Knowledge about medicines prescribed for better sleep quality
2. Skills		Lack of skills to prepare (cook) food	Ability (or lack of) to interpret health related information available online			
3. Social/ Professional Role and Identity	Being personally responsible for the homelessness and poor health		Identity as a patient, being an 'open book'		Social influence in taking up and giving up risky behaviours	Identity as a 'rough sleeper'
4. Beliefs about Capabilities	Losing self esteem	Poor health impacting on ability to eat healthily… not being able to 'open a tin.'	Self-confidence in asking health information from other individuals	'Nothing I could do' to maintain personal hygiene	Self-confidence in avoidance of risky behaviours	Disability, morbidity impacting Self-confidence or lack of in using physical exercise facilities
5. Optimism	Pessimistic about bringing positive change to health				Having already done 'irreversible' damage to health	Pessimistic about adopting better sleep pattern
6. Beliefs about Consequences	Consequences of prolonged homelessness on health	Consequences of not eating healthily			Consequences of illicit use of drugs, smoking and alcohol misuse to the health of	Consequences of good physical activity and sleep on health

7. Reinforcement	Positive health to enable job, work Lack of motivation to maintain health in temporary accommodation					
8. Intentions	Intention (or lack of) to maintain a good health such as keeping warm	Intention to eat healthily, e.g. through family, friends, charities Non-intention to spend on good food due to illicit drug habits	Intention (or lack of) to seek health information	Intention (or lack of) to remain clean	Intentions to come off drugs, smoking or alcohol	Lack of intentions to exercise Intentions to sleep well Seeking medications for better sleep quality
9. Goals **10. Memory, Attention and Decision Processes**	Good health a goal or in the 'back burner' Decision to make positive changes to health	Eating healthily a goal or not a goal		'More important things to worry about'	Goal setting in giving up risky behaviours	Physical activity not a goal or a priority Too tired to think about exercise, sleeping with 'one eye open'
11. Environmental Context and Resources	Vulnerable/ prone to poor health due to environmental hazards, lack of sleep Barriers of using health services including difficulties registering to the health care services and also lack of	Lack of facilities to store, cook or warm up food Lack of money to buy quality food Charity monetary resource to buy food Shoplifting to satisfy hunger	Resources including doctors, nurses and online sources or lack of seek health information	Lack of facilities for showers, Use of available facilities for shower, Use of limited facilities such as toilets for shower Charity facilitates to wash or dress clean	Importance of rehabilitation centres, methadone programmes and smoking cessation services on participants giving up of risky behaviours	Use of gym and exercises in temporary accommodation Weather having a big impact on sleep quality when rough sleeping

	Not being able to keep warm, Lack of place to store medicines					
Social influences	Alienation due to homelessness, lack of social support in maintaining health Impact of stigma and discrimination	Family and friends support to eating healthily Positive role of health care professional advice on healthy eating		Support from friends and family in maintaining personal hygiene	Social influence on taking up or giving up risky behaviours	Negative social attitude to rough sleeping, violence faced during rough sleeping
13. Emotion	Poor mental health, stress, depression, paranoia, suicidal ideation, feeling vulnerable, lack of self-esteem	Hunger often lasting several days	Mental health issues leading to fear and anxiety in learning new things Reluctance to speak about homelessness and its impact on health to HCPs they are not acquainted with	Fear of abuse due to poor hygiene	Illicit drug use as a coping mechanism	Personal worries disabling any sleep
14. Behavioural Regulation	Adoption (or non-adoption) of positive health behaviour; Adherence to the treatment to improve health	Discontinuation of drugs to eat healthily Attempting to eat as healthily as possible		Being able to maintain hygiene despite sleeping rough, actively seeking shower and clean up facilities	Determination (or lack of) giving up risky behaviours	Walking (instead of public transport) to improve health when no longer homeless

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