

Healthcare needs, expectations and experiences of people experiencing homelessness in Western Switzerland: a qualitative and quantitative descriptive study

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Summary

AIMS: The literature from Canada, the UK and the USA reports health inequities among people experiencing homelessness; however little is known about this population's health in Switzerland. Our study is the first to comprehensively assess health needs, expectations and experiences of people experiencing homelessness in Switzerland.

METHODS: We describe the health needs, expectations and experiences of people experiencing homelessness in French-speaking Switzerland, using both quantitative and qualitative methods. From May to August 2022, 123 people experiencing homelessness completed quantitative questionnaires about health needs, expectations and experiences. Recruitment took place in 10 homeless-serving institutions across four cities in the Canton of Vaud. A total of 18 people experiencing homelessness and 13 professionals involved in the homeless-serving sector completed qualitative interviews. For the qualitative strand, we selected people experiencing homelessness using quota sampling based on health insurance, residency status and sex representativeness according to the study population. For homeless-serving sector professionals, we used quota sampling by professions (i.e. night watcher in shelters; social/healthcare workers) ensuring balance. In addition, we aimed to recruit at least one homeless-serving sector professional from each of the ten institutions included in the parent research project.

RESULTS: The most common health issues reported were musculoskeletal, dental and psychiatric. Thirty-one percent of people experiencing homelessness had visited emergency rooms and 27% a community health centre in the prior 6 months. People experiencing homelessness re-

ported low quality of life according to the WHOQOL, especially in social and environmental domains; 33% reported moderate and 17% high grade of psychological distress. Findings indicated that up to 32% of participants reported facing difficulties in reaching out to the healthcare system. In qualitative interviews, people experiencing homelessness described positive perceptions about the Swiss healthcare system. However, people experiencing homelessness reported various barriers encountered while seeking healthcare (e.g., health insurance, financial barriers, appointment delays, hesitancy in accessing care, prioritising other needs). Both groups commonly reported that social situations impacted the health and healthcare use of people experiencing homelessness.

CONCLUSION: People experiencing homelessness in Switzerland are not spared by the common health inequities reported in Canada, the USA and the UK. Our results provide interesting foundations on which to build public health actions towards health equity for people experiencing homelessness in Switzerland and suggest that they could benefit from additional medical follow-up and tailored interventions.

Introduction

A recent report by the European Social Policy Network indicated that the number of people experiencing homelessness increased over the last decade in most European countries [1]. Homelessness has a major impact on health. People experiencing homelessness are disproportionately affected by mental health [2, 3], substance-use [4] and physical health issues (e.g. dermatological [5], metabolic [6], injuries [7]). Their management of these conditions is

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complicated by a lack of medical follow-up [8], and challenges with other needs to support self-management [9]. Many people experiencing homelessness lack regular primary care providers, which leads to increased use of emergency rooms (ER) for care [10, 11]. In addition, health-associated costs are higher among people experiencing homelessness than housed people [12]. These often-multiple difficulties typically lead to a reduced life expectancy in this population. For instance, in the Netherlands, a study showed that at age 30, life expectancy was lowered by 11 years in homeless women and 15.9 years in homeless men when compared to the general population [13].

Switzerland is not without people experiencing homelessness, but little data concerning their health is available. It is estimated that about 250 individuals are homeless in Lausanne, the capital of Vaud Canton [14]. No estimate is available for the other, smaller towns and cities. Very few studies have explored health of people experiencing homelessness in Switzerland: in the German-speaking part, one study described that 96% of 338 people experiencing homelessness surveyed suffered from mental health conditions [15], and two described the inpatient management as well as their demographics and clinical characteristics [16, 17]. In Geneva Canton, one study reported high adherence to tuberculosis screening programmes [18], and another a higher rate of COVID-19 infections among people experiencing homelessness than the general population [19].

In certain European countries and in North America, besides quantitative epidemiological research, qualitative research has explored health needs, barriers to healthcare and healthcare experiences of people experiencing homelessness. In these studies, they acknowledged the impact of their social situation on their health [20, 21]. Despite important health-related needs, they reported prioritising other needs (e.g. finding food and shelter) over their health [20–26]. People experiencing homelessness often face negative interactions with healthcare professionals [20, 22, 27], resulting in further challenges in accessing healthcare. Furthermore, they expressed difficulties navigating healthcare systems [22, 24, 26].

Taken together, both qualitative and quantitative findings document important health inequities that affect people experiencing homelessness: a high burden of health-related problems and reduced access to care compared to non-homeless individuals. Most of this research was conducted in English-speaking countries (United States, Canada and the United Kingdom). It is important to examine to what extent these findings are transferable to other countries, given differences in healthcare and social systems. Moreover, a call to better understand and characterise homelessness has been made in Switzerland [29]. In response, this study aimed to provide a comprehensive assessment of the health needs, expectations and healthcare experiences of people experiencing homelessness in Vaud Canton (French-speaking; 826,380 residents, constituting approx. 9.4% of the Swiss population [30]), by using both quantitative and qualitative methods among people experiencing homelessness and homeless-serving sector professionals. This was a secondary study of a larger research project aimed at developing and testing a complementary medicine intervention for people experiencing

homelessness in French-speaking Switzerland [31]. The present study had the following aims:

- to describe health needs, use of the healthcare system, difficulties and likelihood of accessing healthcare of people experiencing homelessness;
- to explore the experiences of people experiencing homelessness in the healthcare system, their needs and expectations from their own perspective and from that of homeless-serving sector professionals.

Methods

Study design and setting

We used a triangulation design with a convergence model [32]. Quantitative data collection was first conducted followed by qualitative interviews. Both methods had the same priority. We then compared both quantitative and qualitative findings and interpreted our results according to both methods. This design provides more information on the topic at hand than could have been garnered using a single method, while reinforcing the validity of results [33–35].

Participants

The study was conducted in French-speaking Vaud Canton of Switzerland. It has been reported that there are 250 people experiencing homelessness in Lausanne [14], so we set out to recruit at least 125 participants.

In total, 288 people experiencing homelessness were invited to participate in the study; 128 of them provided informed consent to participate and completed the questionnaire. After verification, 5 participants were subsequently excluded (3 had duplicates and 2 did not meet the inclusion criteria), leading to a final sample of 123 participants. For the qualitative interviews, for people experiencing homelessness we selected a quota sample according to health insurance status and residency status, while ensuring that the sex proportions of the sample were representative of those in the target population. For homeless-serving sector professionals, we selected a quota sample according to professions (i.e. night watcher in shelters; social/healthcare workers), again ensuring representative sex proportions. In addition, we aimed to recruit at least one homeless-serving sector professional from each of the ten institutions included in the parent research project. For both homeless-serving sector professionals and people experiencing homelessness, recruitment occurred until reaching data saturation in each sampling category.

Inclusion criteria for people experiencing homelessness were:

- is presently homeless, according to the following categories of the Ethos-light typology [36]: 1. living rough; 2. sleeping in emergency accommodation; 3. living in accommodation for the homeless; 5. living in non-conventional housing (categories 4 and 6 were excluded for recruitment purpose);
- is aged ≥ 18 years;
- is fluent in one of the languages in which the questionnaire was translated into.

Exclusion criteria were:

- is unable to provide informed consent due to language, intoxication or psychiatric decompensation;
- has already completed the questionnaire or taken part in the qualitative interview.

Inclusion criteria among homeless-serving sector professionals were:

- is aged ≥ 18 years;
- has provided informed consent;
- works in one of the homeless-serving institutions in the canton.

Procedures

Recruitment was conducted over a 10-week period (May to August 2022) across 10 different homeless-serving institutions (six emergency night shelters, a community health centre and three day shelters) in four cities in Vaud Canton (Lausanne, Yverdon-les-Bains, Vevey and Nyon). Potential participants were recruited through flyers describing the study and were approached by the research team who provided information to interested people experiencing homelessness. The research team provided active paper-pencil administration of the questionnaires to the participants. The questionnaire content was adapted according to professionals involved with people experiencing homelessness and an association specialised in making written content accessible (*Lire et Écrire*). Then, it was translated and back-translated into 12 languages (English, Spanish, Italian, Portuguese, Romanian, Serbian, Albanian, Literary Arabic, Turkish, Bulgarian, Mandarin, Russian) by research team staff and medical students who were fluent in both French and each translation language. As the questionnaires were researcher-administered, the research team used them in languages they understood (French, English, Arabic, Portuguese). When participants spoke a language not understood by the research team (such as Romanian), a community interpreter assisted them. Completing the questionnaires took approximately 40 minutes. All participants provided signed written informed consent. The qualitative interviews were conducted by a member of the research team with experience in qualitative research (EH, a PhD candidate; JN, a Master's level medical student; VG, a PhD) under the supervision of author VG. Qualitative interviews were conducted using an interview guide (one for people experiencing homelessness, one for professionals involved with people experiencing homelessness; both are provided in the appendix) with open-ended questions and probes to explore the experiences and health needs of people experiencing homelessness. Qualitative interviews were conducted until data saturation was reached, i.e. when no new ideas were expressed in the interviews. The mean interview duration was 45 minutes. The homeless participants received a 10 CHF (~11 USD) grocery gift card for completing the questionnaire and an additional 20 CHF (~22 USD) one for taking part in the qualitative interview. The study was conducted in accordance with the Declaration of Helsinki, and all procedures were approved by the local ethics committee on human research (project number: ID 2022–249).

Measures

Quantitative measures

Demographic variables. A set of 11 items assessed sociodemographic variables including age, sex, nationality, residence permit, education, health insurance and ETHOS-Light typology (1. living rough; 2. sleeping in emergency accommodation; 3. living in accommodation for the homeless; 5. living in non-conventional housing) [36].

Quality of life. Participants' quality of life (QoL) was assessed with the WHOQOL-BREF scale, a validated 26-item questionnaire which measures satisfaction across four domains: physical (7 items); psychological (6 items); social (3 items); environmental (8 items) [37]. A percentage rating was computed for each domain, with scores ranging from 0 (lowest QoL) to 100 (highest QoL).

Psychological distress. Levels of psychological distress were assessed with the validated Kessler scale (K6). This scale screens for mental illness symptoms over the past 30 days [38]. It includes 6 items evaluating the feelings associated with anxiety, depression and restlessness. Participants were asked to indicate how often they experienced each feeling on a scale from 0 (never) to 4 (all the time). The scores were summed to give a total score ranging from 0 to 24. According to the literature [39], the score can be used to indicate low-grade (0 to 7), moderate (8 to 12) and serious (13 to 24) psychological distress. A score greater than 13 indicates serious mental illness.

Health-related needs and use of healthcare services. Health-related needs were assessed with an open-ended question asking participants to indicate their main health problem. An additional item asked participants to report which healthcare services they had used in the last six months.

Likelihood and difficulty of accessing healthcare. Participants' likelihood of accessing care and the degree of difficulty they face when accessing healthcare services when necessary were assessed with four items adapted from the Theory of Planned Behaviour [40]. Specifically, participants were asked to indicate their likelihood of accessing healthcare services for physical and psychological problems on a Likert scale from 1 (likely) to 7 (unlikely). In addition, participants were asked to indicate their difficulty in accessing healthcare services for physical and psychological problems on a Likert scale from 1 (easy) to 7 (difficult).

Qualitative measures

We conducted semi-structured interviews with people experiencing homelessness, using an interview guide to explore health-related experiences (e.g. "What is it like when you visit healthcare services?"), needs (e.g. "How well do you think the care you receive meets your health needs?") and expectations (e.g. "What could be done to improve healthcare in your opinion?"). To complement this data, we conducted semi-structured interviews with homeless-serving sector professionals, exploring their perceptions of the health needs of people experiencing homelessness (e.g. "In your view, what are the reasons for people experiencing homelessness to visit the healthcare system?"), their experiences (e.g. "In your opinion, what is it like for people experiencing homelessness when they need to vis-

it healthcare?") and expectations (e.g. "In your opinion, which structure would be the most appropriate for people experiencing homelessness to receive care?"). Both interview guides are provided in the appendix.

Data analysis

Quantitative analysis

The questionnaire data was recorded in REDCap® by a research assistant (JN). A second researcher (EH) double-checked data entry to minimise errors. Descriptive statistics were used to summarise the data (e.g. proportions, means, standard deviations). Descriptive statistics were performed using IBM SPSS (version 27) by the first author (LS) under the supervision of the last author (VG).

Qualitative analysis

The data was analysed using inductive conventional content analysis with a comparative process [41, 42]. The interviews were recorded and then transcribed verbatim by a professional transcriptionist. To develop the two codebooks, two researchers (EH, PhD candidate, and LS, a medical doctorate candidate) with experience in qualitative research completed initial coding independently. The researchers pooled their codes to reduce redundant, idiosyncratic or common codes to generate a comprehensive codebook. A third senior researcher (VG, a PhD, Privat-Docent tested the codebook and provided feedback, resulting in codebook adaptations. Then, three researchers (EH, VG and LS) triple-coded 10% of the interviews until an inter-judge agreement of at least 80% was obtained. A single researcher (LS) conducted focused coding on the rest of the interviews and explored overarching topic areas using AtLAS.ti software version 9.0.3.

Ethics and informed consent statement

The study was conducted in accordance with the Declaration of Helsinki and all procedures were approved by the local ethics committee (project number: ID 2022—249).

Results

Quantitative results

Demographics (table 1)

In total, 123 people experiencing homelessness completed the quantitative questionnaires. The mean age of participants was 41.2 years (SD: 12.2) and most (91%) were men (table 1). The majority was from Europe (52%) and did not hold a Swiss residence permit (62%). Health insurance coverage was reported by 49% of the participants. Most participants usually slept in emergency shelters (60%).

Quality of life (table 2)

Mean scores for QoL domains ranged from 48.2 (SD: 21.1, range: 0–100) for environmental QoL to 68.3 (SD: 20, range: 6–100) for psychological QoL (table 2). Participants reported mean scores of 65.3 (SD: 20.5, range: 6–100) for

physical QoL and 53.8 (SD: 27.2, range: 0–100) for social QoL.

Psychological distress (appendix)

In total, 50% of the participants reported low levels of psychological distress, 33% reported moderate levels of psychological distress and 17% reported high levels of psychological distress.

Healthcare use and needs (table 3)

There was an average of 1.56 (SD: 0.95) health issues per participant among those reporting at least one health issue. About a third (31%) of participants reported having no issues, followed by musculoskeletal (27%) and psychiatric (15%) problems. Participants reported various chronic conditions, including cardiovascular conditions (9%).

As for their use of healthcare services over the previous six months, 25% reported not having used any. Conversely, 31% mentioned using ER, 27% reported using the canton's community health centre for underserved populations and 19% reported having consulted nurses in homeless shelters. Finally, only 7% reported having seen a general practitioner in the last 6 months (table 3).

Intention and difficulty accessing healthcare (table 4)

When asked to assess their likelihood of visiting healthcare when needed, most participants (57%) responded that they would likely visit healthcare services if they presented a somatic problem in the following two months, whereas only 37% said they would do so for psychological health problems. When asked to assess how difficult it would be for them to visit healthcare for physical concerns, 20% considered it difficult. As for seeking care for mental health problems, 25% felt that it would be difficult for them (table 4). Interestingly, 39 participants (32%) reported finding it difficult to reach out to the healthcare system for either psychological issues, somatic issues or both.

Qualitative results

A subset of the sample of people experiencing homelessness (n = 18; 72% men) and homeless-serving sector professionals (n = 13; 62% women) completed qualitative interviews. Four topic areas emerged from the analysis:

- health issues common for people experiencing homelessness;
- healthcare use and experiences among people experiencing homelessness;
- barriers faced by people experiencing homelessness in accessing healthcare and ways to reduce them;
- when the social situation makes people sick.

The themes that emerged from the analysis are summarised in table 5.

Health issues common for people experiencing homelessness

The first topic area reported by both people experiencing homelessness and homeless-serving sector professionals related to the health issues commonly faced by people experiencing homelessness. Consistent with quantitative findings, participants (both groups) reported that people experiencing homelessness faced the following health problems: musculoskeletal (e.g. participant 9: “In general, for my polyarthritis”) and psychiatric (e.g. professional 7: “There are psychiatric disorders, that’s obvious”).

Healthcare use and experiences among people experiencing homelessness

Consistent with quantitative findings, people experiencing homelessness and homeless-serving sector professionals reported people experiencing homelessness using ER to seek care, for practical reasons, “I went to the ER because I could not wait 2 weeks to see my general practitioner” (participant 12), or as an entry point into the healthcare system, “In the ER. [...] From there, they decide if I need to stay at the hospital or not.” (participant 11). Conversely, very few of the people experiencing homelessness reported seeing a general practitioner.

Table 1:
Demographic characteristics of participants (n = 123).

Age	Age in years, mean and SD	41.2	12.2
	Missing, n and %	2	2.46%
Sex		n	%
	Male	112	91%
	Female	11	9%
Nationality	European	64	52%
	Non-European	51	41%
Residence status	No residence permit	76	62%
	B (residence foreign national's permit)	10	8%
	Swiss	8	7%
	N (permit for asylum seekers)	5	4%
	Other*	4	3%
	C (settled foreign national permit)	3	2%
	Did not know	10	8%
	Did not want to answer	3	2%
	Missing	4	3%
Education	Compulsory education	30	24%
	High school level	30	24%
	General professional apprenticeship	24	20%
	College education	19	15%
	Did not finish school	18	15%
	Did not want to answer	2	2%
Has health insurance	Yes	60	49%
	No	60	49%
	Did not know	1	1%
	Did not want to answer	1	1%
	Missing	1	1%
Ethos Light typology	Emergency shelter	74	60%
	Sleeping rough	25	20%
	Non-conventional accommodation**	7	6%
	Sleeping at relative's place	7	6%
	Lost their home	4	3%
	Refugee shelter	3	2%
	Institution	1	1%
	Did not know	1	1%
	Did not want to answer	1	1%

* G and L permits (respectively, cross-border commuter permit and short-term residence foreign national permit).
** E.g. mobile homes, squatting, temporary structures, camp.

Table 2:
Participants' quality of life (QoL) scores (n = 123). Potential values are in range 0 to 100, with higher values denoting better QoL.

QoL domain	Domain 1	Domain 2	Domain 3	Domain 4
	Physical	Psychological	Social	Environmental
	Min = 6; max = 100	Min = 6; max = 100	Min = 0; max = 100	Min = 0; max = 100
n	123	122	123	122
Score, mean	65.3	68.3	53.8	48.2
Score, standard deviation	20.5	20	27.2	21.1

Additionally, some participants reported seeking care via the canton’s community health centre, as well as through outreach programmes in emergency shelters. Both groups generally reported positive perceptions of people experiencing homelessness of those: “[Community health centre] is helping me for the medicines” (participant 10).

Table 3:
Current health issues and recent contact with healthcare providers (n = 123).

	n	%
Current health issues		
None	34	31%
Osteoarticular problems (including back pain)	30	27%
Dental problems	17	15%
Psychiatric (including substance misuse)	16	15%
Cardiovascular problems	10	9%
General conditions	9	8%
Dermatological problems	7	6%
Respiratory problems	5	5%
Gastrointestinal problems	5	5%
Surgical problems	5	5%
Diabetes	4	4%
Ophthalmological problems	4	4%
Headache	3	3%
Neurological and neurosurgery	3	3%
Non-specific symptoms	2	2%
Angiological problems	2	2%
Other (does not fit any of the conditions above)	1	1%
Did not provide answer	13	12%
Healthcare providers seen in last six months		
None	31	25%
Pharmacist	44	36%
Emergency room	38	31%
Community health centre*	33	27%
Shelter nurse	23	19%
Dentist	21	17%
University walk-in clinic	18	15%
Psychologist/ Psychiatrist	17	14%
Specialist	15	12%
Social ambulance service	9	7%
General practitioner	8	7%
Surgeon	6	5%
Other	4	3%

* The canton’s only community health centre providing care to underserved populations.

Table 4a:
Likelihood and difficulty accessing care.

Likelihood/difficulty	n	Mean	Median	Mode	SD	Missing
Likelihood of using healthcare for a physical health issue	123	2.62	1.00	1.00	2.20	0
Likelihood of using healthcare for a psychological health issue	122	3.89	4.00	4.00	2.61	1
Difficulty seeking physical care	123	3.19	2.00	1.00	2.39	0
Difficulty seeking psychological care	121	3.79	4.00	1.00	2.49	2

Table 4b:
Intention (in the following 2 months) to access care, using a Likert scale (n = 123).

	1 (like-ly)		2		3		4		5		6		7 (unlike-ly)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
If I were to present a physical health issue (e.g. pain or injury), I would seek help through healthcare	70	57%	5	4%	10	8%	15	12%	2	2%	5	4%	16	13%
If I were to present a psychological health issue (e.g. feeling desperate or anxious), I would seek help through healthcare	45	37%	5	4%	8	7%	11	9%	7	6%	6	5%	40	33%

Table 4c:
Behaviour (in the following 2 months) accessing care, using a Likert scale (n = 123).

	1 (easy)		2		3		4		5		6		7 (difficult)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
If I had to visit a healthcare professional for a physical health issue, it would be ...	50	12%	15	12%	12	10%	11	9%	3	2%	7	6%	25	20%
If I had to visit a healthcare professional for a psychological health issue, it would be ...	41	8%	10	8%	7	6%	12	10%	8	7%	12	10%	31	25%

When accessing healthcare, most people experiencing homelessness reported positive interactions with the staff: “I have a good opinion about doctors” (participant 7). Some, although rarer, reported negative experiences: “Last time I went to [university hospital], they told me ‘You always come here’” (participant 5).

Overall, people experiencing homelessness reported being satisfied with their care: “The healthcare system works fine in my opinion” (participant 3). In fact, frequently people experiencing homelessness considered their healthcare experiences in Switzerland better than the ones they had in other countries: “In [other country], everything about healthcare is complicated! [...] But Switzerland it’s not like that: they take care of you right away.” (participant 18).

Barriers faced by people experiencing homelessness in accessing healthcare and ways to reduce them

Still, people experiencing homelessness reported encountering various barriers to accessing healthcare. Most of them expressed that their difficulties in receiving care stemmed largely from lacking health insurance: “The doctor doesn’t want to see me because I lost my health insurance because I lost my permit. So, I don’t have the right to obtain medications!” (participant 9). Some people experiencing homelessness reported that a lack of financial resources was an obstacle to healthcare access. Participant 3 said: “Due to lack of means we hesitate [to visit healthcare]”.

Since there is only one community health centre for underserved populations in Vaud Canton, located in Lausanne, participants (both groups) reported limited appointment availability and long waiting times due to the high number of patients. Participant 2 explained: “It’s in three weeks’ time or something. But if I am sick now, I cannot wait three weeks.” In addition, homeless-serving sector professionals reported many difficulties of people experiencing homelessness in getting there: “We send people to Lausanne to the [community health centre] [...] but the people don’t go

because it’s far and they have to take the train” (homeless-serving sector professional 3).

Furthermore, some professionals and participants reported that it is common for people experiencing homelessness to fear the healthcare system and providers, which prevented them from seeking care, emphasising the importance of trust in their care providers, for instance because of dreading being judged by the staff: “Another thing that’s holding you back is the judgement” (participant 13). Both groups expressed that some people experiencing homelessness were afraid of being reported to the authorities, “Because we were undeclared workers, see, we were scared: [university hospital] and so on!” (participant 12), or of being admitted against their will, “They fear doctors: those are people [...] who have experienced involuntary hospitalisation” (professional 5).

In addition, according to most of the homeless-serving sector professionals, seeking healthcare was not a top priority for people experiencing homelessness, who prioritised other, more immediate needs. Professional 6 explained: “Where to eat, where to sleep, how to protect themselves from aggression [...], these are people’s first priorities, and in fact, health comes second, third, fourth, fifth”. One of the contributors to this lack of prioritisation seems to be poor health literacy; participant 13 explained: “We tell ourselves ‘It’s going to pass, we’ll see’ and being no doctor, having not taken any tests, we don’t know what’s going on in the body and finally, generally when we tell ourselves ‘Well, I am going to go now’, it may already be too late.”

In response to the reported barriers, both groups agreed that people experiencing homelessness needed better access to medical care. Participant 5 reported, “More medical help [is required]”; in particular both groups expressed the need for more mental health care: “I would like to find a good doctor for my depression” (participant 6). To improve access to healthcare for people experiencing homelessness, the professionals suggested developing more community health centres like the existing one. Professional 12 suggested: “Based on the [community health centre] and develop, make small ones”. In addition, the professionals val-

Table 5:
Qualitative results (18 people experiencing homelessness and 13 homeless-serving sector professionals).

Themes and subthemes		Example quote
Experiences in healthcare	Health issues: same as those reported in the quantitative strand	“In general, it [the consultation’s reason] is for my polyarthritis” (participant 9)
	Emergency rooms as means of accessing healthcare	“I went to the ER because I could not wait 2 weeks to see my general practitioner” (participant 12)
	Positive perspectives	“Honestly I have a good opinion about doctors, I always have received good care” (participant 7)
Barriers to seeking healthcare	Lack of health insurance	“The doctor doesn’t want to see me because I lost my health insurance because I lost my permit. So, I don’t have the right to obtain medications!” (participant 9)
	Delays for appointments in the existing community health centre	“They say ‘No, no, it’s in three weeks’ time’ or something. But if I am sick now, I cannot wait three weeks.” (participant 2)
	Fear	“We were scared: [University hospital] and so on!” (participant 12)
	Health not being a top priority	“We tell ourselves, ‘It’s going to pass’” (participant 13)
	Economic reasons	“Due to lack of means we hesitate” (participant 3)
Ways to overcome said barriers	More medical care	“More medical help [is required] not only for me, but the others too” (participant 5)
	Developing more community health centres	“Based on the [community health centre] and develop, make small ones” (professional 12)
	The importance of drop-in services	“Instead of giving them appointments [...] that the visit could be done at the time of the request” (professional 5)
When the social situation makes people sick	Impact on health of people experiencing homelessness	“To be concerned about where to eat, concerned about employment, it’s quite a lot for the head” (participant 16)
	Impact on healthcare use of people experiencing homelessness	“I have a general practitioner, but [...] it’s been 3–4 times I have missed the appointments because of the night shelter... I hadn’t slept all night! [...] So, I had to visit the ER.” (participant 12)

ued drop-in services, “Instead of giving them appointments [...] that the visit could be done at the time of the request” (professional 5), and outreach programmes, “What’s working best is that the medical staff comes to the person” (professional 6).

When the social situation makes people sick

The barriers reported above were commonly related to the social and economic determinants of health of people experiencing homelessness, which had direct and indirect consequences on their health. People experiencing homelessness commonly linked their social situation with their use of healthcare services. Participant 2 explained: “Normally nobody with diarrhoea goes to the ER but when you don’t have a home, you have to run all day.” They also reported the impact their social situation had on their health, by causing homelessness-specific conditions: “The mattress, you see, that’s the problem. Scabies is transmissible, and so are bedbugs.” (participant 12). Finally, people experiencing homelessness expressed how the social situation affected their mental health; participant 16 explained: “To be concerned about where to eat, concerned about employment, it’s quite a lot for the head”; this was so severe that one of them even stated that these struggles have led him to suicidal ideations: “If I don’t see a place to stay, if I cannot sleep: I can end my life” (participant 10).

Discussion

To the best of our knowledge, this is the first study describing the healthcare needs, experiences and expectations of people experiencing homelessness in Western Switzerland.

Health status of people experiencing homelessness

In line with a previous Swiss study [15], we found a high prevalence of serious mental distress among people experiencing homelessness, with 17% high risk psychological distress, more than 3-fold higher than in the general Swiss population over 15 years of age according to the Swiss Health Survey, although defined with a different screening instrument [43]. A meta-analysis including studies from high-income countries (for instance US, UK and Germany) reported the prevalence of mental illnesses among the homeless to be 76.2%, mainly alcohol use disorders (36.7%) followed by drug use disorders (21.7%) and schizophrenia-spectrum disorders (12.4%) [44]. Our study reported lower results. This might be because the K6 Score does not consider psychotic disorders nor substance misuse but is more a screening tool. More research to characterise mental health of people experiencing homelessness in Switzerland is needed. As reported in other countries, QOL scores of people experiencing homelessness were lower than in the general population [45]. No WHOQOL data was available for the Swiss general population for comparison, but our results are much lower than those in Denmark [46]. Although this comparison requires caution, these findings suggest that, as elsewhere, people experiencing homelessness in Switzerland are at risk of experiencing lower QoL than the general population. Moreover, consistent with previous studies [22], both groups reported that homelessness has a considerable negative impact on the

health of people experiencing homelessness and is a major driver of healthcare use patterns.

Health needs of people experiencing homelessness

Most participants in our sample did not have residence permits. This can be explained by the fact that emergency shelters cater for the most precarious section of Swiss society (lack of social assistance and subsidies). To reduce those structural health inequities, policies need to act on social determinants of health. Programmes such as Housing First have shown promising findings in terms of improving QoL, mental health and need for inpatient care [47–50]. In Switzerland, Housing First research is just beginning [51]. Moreover, as reported elsewhere [10, 11], our findings suggest that people experiencing homelessness may be more likely to seek care in ER settings due to lack of other options: 31% reported visiting the ER over the previous six months, which is slightly more than the general Swiss population: the Swiss Health Observatory reported in 2016 that approximately 20% of the Swiss population of this age visited the ER at least once over one year [52]; this rate is higher when the patients are from abroad and similar to those identified in our study. In Switzerland, although health insurance is mandatory, undocumented people often lack insurance coverage, limiting their care outside ED. Although some emergency care might be needed, it does not replace follow-up. Strengthening the ambulatory care network of people experiencing homelessness via primary care physicians showed good outcomes in Canada [8]. In Australia [53], the implementation of a psychiatric outreach programme has shown positive outcomes on emergency psychiatric visits. Therefore, addressing social determinants of health via Housing First combined with actively providing outreach psychiatric and primary care programme appear to be two areas for action.

Experiences of healthcare of people experiencing homelessness

Inconsistent with past international literature documenting negative experiences in healthcare [54–56], homeless participants reported mostly positive healthcare experiences. In fact, some people experiencing homelessness reported previous negative healthcare experiences in other countries and considered their care to be better in Switzerland. Consistent with the literature, people experiencing homelessness in our study seemed to place a lower priority on seeking healthcare compared to other, more pressing needs [22]. Additionally, although not evaluated in the current study, people experiencing homelessness typically have low levels of health literacy [57], which could lead to lower healthcare expectations. In Lausanne, the canton’s main city (where the majority of people experiencing homelessness are found), there are targeted ways for people experiencing homelessness to access healthcare: via *Medecins du Monde*’s outreach programme and the community health centre. Despite these, 32% of people experiencing homelessness encounter difficulties in accessing care. Our qualitative findings provide insights into the barriers to healthcare. Mainly, people experiencing homelessness noted that a lack of health insurance prevented them from accessing healthcare. In addition, in line with previous research, our qualitative findings report other barriers faced in accessing

care [23, 27, 58], namely financial resources, fear of healthcare providers and settings, and prioritisation of immediate primary needs over health. One of the major contributors to the fear of healthcare is the fact that most of our sample (62%) reported not holding a valid Swiss residence permit. Finally, part of the difficulty was attributed to an insufficient number of community health centres, resulting in delays in obtaining appointments.

Limitations

Findings of this study should be interpreted in the light of several limitations. First, participants who completed the quantitative questionnaire were recruited in institutions serving the people experiencing homelessness (convenience sampling); therefore, the sample may not be representative of the whole homeless population that includes those not using or accessing homeless services. It is also possible that the sample might be prone to bias as people experiencing homelessness agreeing to participate in the study may differ from those who declined in their health needs and characteristics. Next, our quantitative study includes self-reported data, which can involve reporting bias with respect to social desirability. We limited this bias by having the research team administer the questionnaire to people experiencing homelessness, using professional translators to ensure understanding, and using validated scales. Next, we used triangulation with the quantitative and qualitative data to enhance trustworthiness. Moreover, findings describe health needs, expectations and experiences of people experiencing homelessness in Vaud Canton, which limits the generalisability of findings, although most findings align with previous national and international research. Finally, the number of people experiencing homelessness in Vaud Canton was unknown and 250 was an estimate dating back to 2018 in Lausanne alone that did not use a standardised methodology. In addition, while the Kessler scale is a good tool for assessing psychological distress, our study did not assess substance misuse and psychotic disorders which are reported as the most frequent among the homeless population [44]. Hence, the prevalence of mental distress reported in our study surely underestimates the psychiatric disorders among people experiencing homelessness. Finally, 91% of our sample were men. This could be explained by the recruitment taking place in homeless shelters of Vaud Canton in which the population is composed of men in majority (86.3%) [59]. Our results are similar to those reported in other Swiss studies [60].

Conclusion

Our study makes an important contribution to the existing literature by being the first to describe the health needs, experiences and expectations of people experiencing homelessness in Western Switzerland. Our findings indicate that people experiencing homelessness in Switzerland are subject to common homelessness-associated health conditions. Unlike previous findings from the international literature, our results highlight rather positive perspectives of people experiencing homelessness about the healthcare system, although access to healthcare remains challenging for people experiencing homelessness in Switzerland. In addition, our study highlighted specific needs and perspec-

tives of people experiencing homelessness in Switzerland about health that influence their healthcare use. Concrete public health actions need to be undertaken such as: (1) the development of novel interventions to provide enhanced medical care to this population to address psychiatric and somatic care; and (2) the creation of public policies that act upon the socioeconomic determinants of health to improve the health of this population in Switzerland.

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Potential competing interests

All authors have completed and submitted the International Committee of Medical Journal Editors form for disclosure of potential conflicts of interest. No potential conflict of interest related to the content of this manuscript was disclosed.

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Appendix

Appendix A Psychological Distress (Kessler K6) score (N =123)¹

In the last 30 days, how often did you feel...	Never		Rarely		Some-times		Most of the time		All the time		Miss-ing
	n	%	n	%	n	%	n	%	n	%	
Nervous	27	22	17	14	51	41	23	19	5	4	0
Hopeless	46	38	23	19	26	21	16	13	10	8	2
Restless	48	39	22	18	28	23	13	11	6	5	1
So depressed that nothing could cheer you up	53	43	22	18	27	22	14	11	7	6	0
That everything required an effort	39	32	12	10	31	26	17	14	15	12	2
Worthless	65	53	15	12	28	23	8	7	6	5	1
Overall grades and scores of Psychological Distress											
Grade (score)	n					%					
Low Psychological Distress (0-7)	62					50					
Moderate Psychological Distress (8-12)	40					33					
High Risk Psychological Distress (13-24)	21					17					

¹ Score evaluating the frequency of psychological distress' symptoms (0 = never, 4=all the time). Score ranging from 0 to 24. The higher the score, the higher risk of mental illness. A score of ≥13 indicate serious mental illness.

Appendix B. Quantitative Questionnaire

Demographics

The first questions concern your personal situation. The questionnaire is **anonymous**. All information will **only be known** by the important members of **the research team**.

1. What is your gender?

- ☐ Man
- ☐ Woman
- ☐ Other

2. How old are you? _____

3. How long have you been living in Switzerland? _____

4. What is your nationality? [1 possible answer].

- ☐ Switzerland (1) → go to question 7
- ☐ European (2) (specify country) : _____
- ☐ Non-European (3) (specify country) : _____
- ☐ I do not know
- ☐ I do not wish to answer (999) → go to question 7

5. What's the type of your residence permit? [1 answer possible]

- ☐ B (1) → go to question 7
- ☐ C (2) → go to question 7
- ☐ F (3) → go to question 7
- ☐ G (4) → go to question 7
- ☐ L (5) → go to question 7
- ☐ N (6) → go to question 7
- ☐ S (7) → go to question 7
- ☐ B on grouping (8) → go to question 7
- ☐ None (777)
- ☐ I don't know (888)
- ☐ I don't wish to answer (999)

6. What's your current situation? [1 possible answer]

- ☐ No application for asylum (1)
- ☐ Non-entry (2)
- ☐ Refusal of the asylum application (3)
- ☐ Dublin case (4)
- ☐ I don't know (888)
- ☐ I don't wish to answer (999)

7. What's your highest level of education? [1 answer possible]

- ☐ No training (schooling not completed) (1)
- ☐ Compulsory school (2)
- ☐ Higher secondary school diploma (high school, college) (3)

- ☐ General and vocational training (CFC) (4)
- ☐ Higher education (UAS, University) (5)
- ☐ I don't know (888)
- ☐ I don't wish to answer (999)

8. Do you have health and accident insurance? [1 answer possible]

- ☐ Yes (1) → If yes, is the insurance? : ☐ Swiss (2) ☐ foreign (3)
- ☐ No (4)
- ☐ I don't know (888)
- ☐ I don't wish to answer (999)

9. How long have you been homeless? _____

10. During the nights of the past 2 weeks, where did you sleep most often? [1 possible answer]

- ☐ Homeless (on the street, shelters in public space, etc.) (1)
- ☐ In an emergency accommodation (Sleep-In, Marmotte, Lucarne, etc.) (2)
- ☐ In a hostel or shelter (e.g. EVAM centers) (3)
- ☐ At a relative's home (a friend or member of my family) (4)
- ☐ Non-conventional housing (mobile homes, camping, squats, temporary structures) (5)
- ☐ Individual housing (tenant or owner) (6)
- ☐ Prison institution (prisons) (7)
- ☐ Health institution (hospital or other) (8)
- ☐ I don't know (888)
- ☐ I don't wish to answer (999)

11. What's your status for accessing emergency shelter? [1 possible answer]

- ☐ G1 (1)
- ☐ G2 (2)
- ☐ G2T (3)
- ☐ G3 (4)
- ☐ I don't know (888)
- ☐ I don't wish to answer (999)

Access to Treatment: Intentions and Attitudes

The following questions ask about how you think to proceed during the next two months if you were to seek medical attention for physical health problems (e.g., pain, injury) and/or psychological health problems (e.g., if you were feeling depressed, anxious).

Intentions

Please circle the appropriate number: 1 means "likely" and 7 means "unlikely"

1. In the next 2 months, I intend to seek help from a health care professional if I think I need it for a physical health problem (e.g., pain or injury)

1	2	3	4	5	6	7
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Probable Unlikely

2. In the next 2 months, I intend to seek help from a health care professional if I feel I need it for a psychological health problem (e.g., if I am feeling depressed or anxious)

1	2	3	4	5	6	7
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Probable Unlikely

Attitudes

Please circle the appropriate number: 1 means "easy" and 7 means "difficult"

1. In the next 2 months, if I were to go to a health care professional for help because I think I need it for a physical health problem, it would be...

1	2	3	4	5	6	7
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Easy Difficult

2. In the next 2 months, if I were to go to a health care professional for help because I think I need it for a psychological health problem, it would be...

1	2	3	4	5	6	7
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Easy Difficult

QUALITY OF LIFE

*This part of the questionnaire evaluates the **quality of life**, i.e. the way you perceive the quality of your life by considering all its aspects such as: your physical and psychological health, your social relationships, your environment etc. No answer is right, it is above all **personal**. The answers must take into account your state **during the last 2 weeks**.*

		Very poor	Poor	Neither poor nor good	Good	Very good
1	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2	How satisfied are you with your health?	1	2	3	4	5

		Not at all	A little	A moderate amount	Very much	An extreme amount
3	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5	How much do you enjoy life?	1	2	3	4	5
6	To what extent do you feel your life to be meaningful?	1	2	3	4	5
7	How well are you able to concentrate?	1	2	3	4	5
8	How safe do you feel in your daily life?	1	2	3	4	5
9	How healthy is your physical environment?	1	2	3	4	5

The following questions ask about **how completely** you have experienced **or** were able to do certain things in the **last two weeks**. Circle your best answer number.

		Not at all	A little	A moderate amount	Very much	Extremely
10	Do you have enough energy for everyday life?	1	2	3	4	5
11	Are you able to accept your body appearance?	1	2	3	4	5
12	Have you enough money to meet your <u>needs</u> ?	1	2	3	4	5
13	How available to you is the information you need in your day-to-day life?	1	2	3	4	5
14	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5
15	How well are you able to get around physically?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16	How satisfied are you with your sleep?	1	2	3	4	5
17	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18	How satisfied are you with your capacity for work?	1	2	3	4	5
19	How satisfied are you with yourself?	1	2	3	4	5
20	How satisfied are you with your personal relationships?	1	2	3	4	5
21	How satisfied are you with your sex life?	1	2	3	4	5
22	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23	How satisfied are you with the conditions of your living place?	1	2	3	4	5

24	How satisfied are you with your access to health services?	1	2	3	4	5
25	How satisfied are you with your transport?	1	2	3	4	5

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

		Never	Sel- dom	Quite often	Very often	Al- ways
26	How often do you have negative feelings such as blue mood, despair, anxiety or depression?	1	2	3	4	5

Psychological health state (K6+)

The following questions ask how you have felt in the **past 30 days**. For each question, indicate the answer that best describes the number of times you have felt this way.

<i>During the past month, how often did you feel...</i>	All the time	Most of the time	Sometimes	Rarely	Never
1.... nervous?	(0) ☐	(1) ☐	(2) ☐	(3) ☐	(4) ☐
2. ...hopeless?	(0) ☐	(1) ☐	(2) ☐	(3) ☐	(4) ☐
3. ...restless or fidgety?	(0) ☐	(1) ☐	(2) ☐	(3) ☐	(4) ☐
4. ...so depressed that nothing could cheer you up?	(0) ☐	(1) ☐	(2) ☐	(3) ☐	(4) ☐
5. ...that everything was an effort?	(0) ☐	(1) ☐	(2) ☐	(3) ☐	(4) ☐
6. ...worthless?	(0) ☐	(1) ☐	(2) ☐	(3) ☐	(4) ☐

Use of the health care system

The following questions ask about the health care services you use when you have a health problem.

1. Currently, what are your main health problems? [Write your answer]

2. To treat this health problem, which health care service would you ideally use if you had the choice?
(conventional medicine, complementary medicine, type of specialist, etc.) [Write your answer]

3. In the past 6 months, which health care service(s) have you used? [Multiple answers possible]

- ☐ None (0)
- ☐ Hospital emergency department (1)
- ☐ Unisanté general medicine consultation (2)
- ☐ Other primary care physician (3)
- ☐ Water point "Service Point d'Eau" (4)
- ☐ Nurses in institutions (e.g., world doctors "Médecins du monde") (5)
- ☐ Dentist (6)
- ☐ Specialist physician (cardiologist, pulmonologist, infectious disease specialist, etc.) (7)
- ☐ Surgery (8)
- ☐ Psychologist or psychiatrist (9)
- ☐ Pharmacy (10)
- ☐ The Mobile Social Emergency Team (EMUS)
- ☐ Other(s) (11): _____

Appendix C. Qualitative Interview Guide 1 (PEH).

Introduction	[Indicate participant's random identification number]. [Use quantitative questionnaire responses as a basis and elaborate on key points]. - <i>As agreed, you are going to participate in an interview. I will be conducting the interview.</i> - <i>The purpose of the discussion is to talk about your experience in care and your expectations and needs in terms of conventional and complementary medical care</i> [Explain what is meant by conventional and complementary approaches] - <i>The data collected during this interview is strictly confidential.</i> - <i>As discussed, we want to record the interview. The recording is done to be able to transcribe the interviews for analysis. Is this ok with you?</i> - <i>Do you have a question before we start?</i> - <i><u>I'll start the recording.</u></i> - [Identify the interview at the beginning of the record: <i>XXX research project at [indicate partner institution], date, name of research team member and participant ID</i>] :	
Experience with the health care system	When you need to consult (for a health problem), where do you usually go? • What structures? • General practitioner ? What happens when you go to the doctor or hospital? • In general (experience, give examples) • What do you appreciate about these contacts? • On the contrary, what don't you like? • How do you feel about the caregivers? Why do you feel this way? • How much trust do you have in the caregivers? • What do you think of the quality of care you received	<i>Describe participants' experiences with the health care system</i> <i>Describe barriers to accessing care</i>

Appendix D. Qualitative Interview Guide 2 (Homeless-serving Sector Professionals).

Experience of working with PEH	You have many years' experience of working with PEH. In general, what is it like to work with this population daily? • What do you like about it? • On the contrary, what is difficult for you? (examples) What are the difficulties you encounter in your work with PEH? • Examples [Repeat the difficulties mentioned] What could be done to alleviate these difficulties?	<i>Describing participants' experience working with PEH</i>
Perceptions of PEH experience of the healthcare system	We would like to understand the experiences of PEH in the healthcare system and your opinion on this subject is very useful to us. What do you think it is like for PEH when they need to seek medical care? • In general? (Give examples) • What difficulties do they encounter? (Give examples) • How do they interact with the healthcare professionals? • In your opinion, how much trust they have in healthcare providers? [If no spontaneous content on accessing healthcare:] In your opinion, what difficulties do these people encounter in obtaining the care they need? In your opinion what could make accessing healthcare easier?	<i>Describing PEH's experiences in the healthcare system.</i> <i>Describe barriers PEH encounter in accessing care</i>
Perception of PEH's needs and expectations of the healthcare system	In your experience, what are the most common reasons why homeless people seek medical care? In your opinion, in which areas should they be given priority support by the healthcare system? • How? • What form does it take? In your opinion, to what extent does the care they receive meet their needs? • Why? • Examples? What could be done differently to better meet their needs? • What could be improved in the healthcare system?	<i>Describe the perceived needs and expectations of PEH towards the Swiss healthcare system.</i>

	• How? • What form does it take? • What is currently missing? What do you think would be the best place(s) to provide care for this population? • Within what structures? What type of professionals do you think should provide care? Doctors, nurses, psychologists, others? Anything else you would like to share?	<i>Conclude the interview and thank the participant for his/her time.</i>
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