

Services for homeless people in Germany during the COVID-19-pandemic: A descriptive study

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Abstract

Design: A cross-sectional study was conducted in December 2020/January 2021 in the five significant cities of Germany.

Sample: 135 of 244 identified service institutions took part in the evaluation.

Measurements: This evaluation included changes in institutions' operating hours as well as capacity for homeless people. Service institutions described changes in guests' characteristics, moods, and mental burden. Finally, equipment including face masks, coveralls, and gloves was investigated. In addition, the study examined how the cooperation with the health authorities works.

Results: Institutions reduced their operating hours and capacity for guests (62.4%). Increased costs, which they had to cover themselves, were reported by 70.9% of institutions. Institutions reported, that guests showed more symptoms of aggression (15%), anxiety (25%), and desperation (32%) and fewer signs of being relaxed (75%). The institutions reported room for improvement in PPE supplies and collaboration with health authorities.

Conclusions: Services are limited for a vulnerable population, which shows changes in moods and mental health. Health authorities are not sufficiently engaged to take over the role of institutions in caring for homeless people. In the future, in-depth investigation to improve this is necessary.

KEYWORDS

COVID-19, homeless person, roofless person, service institutions

1 | INTRODUCTION

Since the beginning of the COVID-19 pandemic in 2020, the slogan "Stay Home" has been circulated globally. However, this is difficult for the estimated 150 million people worldwide who are considered homeless (United Nations-Habitat [UN], n.d.). Homelessness exists in almost all countries for various reasons, such as flight, displacement, and natural disasters. However, in Western countries, the primary causes are

poverty, lack of affordable housing, personal misfortunes and lack of social systems (Institute of Global Health [IGH], 2019; Roth & Bean, 1986).

Homelessness takes various forms. The European Federation of National Organizations Working with the Homeless (FEANTSA) distinguishes four main groups of homeless people whose situations range from inadequate housing to rooflessness. The category of rooflessness includes all persons sleeping in public areas or night shelters

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(FEANTSA, 2006). In Germany, 678,000 people are homeless, 41,000 live entirely on the street or in night shelters, mainly in major cities (BAGW, 2019). A census in Berlin (Germany) in January 2020 counted nearly 2000 people who had no fixed accommodation (Strauß, 2020). BAGW (2019) estimated that about 441,000 of all homeless people in Germany are refugees. Homeless people are predominantly single and male (BAGW, 2019; Busch-Geertsema et al., 2019).

1.1 | Service institutions for homeless people

Living on the street entails various risks. In Germany, low-threshold support services are available for people who live on the street and have not (yet) found permanent accommodation. In opposite to government-based services, low-threshold services offer support without unnecessary barrier to vulnerable persons. They do not need any voucher or coupon. Even fixed appointments are not needed. Guests can easily access these institutions (Konter, 2019). These services are usually funded by municipalities and donations and offered by various providers, some church-based. Generally, these services include several programs, such as emergency overnight stays, soup kitchens, clothing stores, counseling centers, day centers, street social work, and medical care (Trummer et al., 2020). Service institutions tend to be staffed with nurses, social workers and members of other professions. To encourage them to use the available services, staff refer to homeless people as “guests.”

1.2 | Homelessness and health conditions

Lack of access to hygiene or health care, concomitant diseases, substance use, and sexual risk behavior are also factors that contribute to a high rate of infectious disease among homeless people (Liu et al., 2020).

Other health risks include violence, isolation, lack of protection from the weather, financial stress, and lack of access to hygiene and health facilities (Verheul et al., 2020). Various studies from UK and Italy describe the impact of homelessness on health, including an increased and premature occurrence of various somatic diseases, such as cardiovascular (7.5%–17%) and respiratory diseases (1.5%–4%) and diseases of the gastrointestinal tract (5%), chronic medical conditions (48.7%), and multimorbidity (21.3%). The risk of infections is particularly high; pneumonia (30%), hepatitis C (6.3%–13.5%), tuberculosis (2.9%), and other infections are common causes of illness and death (Bowen et al., 2019; Levorato et al., 2017; Lewer et al., 2019). Moreover, data from Europe and Hong Kong show the point prevalence of mental illnesses in a homeless population is about 50% (Gaebel & Zielasek, 2015; Yim et al., 2015).

1.3 | Homelessness and SARS-CoV-2

The outbreak of the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in December 2019, in Wuhan, China, challenged health and social systems worldwide. Globally, the number of cases

increased in spring 2020. After a stable summer with low case numbers, the incidence rose again in October 2020. In Germany, this trend persisted into January 2021 with a peak of 167 cases per 100,000. For the week of December 21–27, 2020, about 24,500 deaths were reported—31% more than the average of the four previous years in Germany (Destatis, 2021).

Regarding the number of infections or deaths of homeless people, no information has been given by the German federal government. Figures from Belgium indicate high rates of Sars-CoV-2 infection of homeless people in shelters (Roland et al., 2021). But the potential for infection is evident. The SARS-CoV-2 crisis may have worsened the situation of homeless people in Europe—e.g., as a result of the economic situation of service providers and homeless people (EU Parliament, 2020). Numbers from the United States showed positive case rates of 17%–66% among tested homeless people (Mosites et al., 2020).

German health authorities recommend several general, basic rules for protection against contracting or transmitting the virus: keep social distance, observe hygiene, wear a community or medical mask, and ventilate rooms regularly (Jung et al., 2020; Kluge et al., 2020). In addition, testing several times a week is recommended for staff in retirement and nursing homes (Rothgang et al., 2020). Various studies have shown that these basic rules, significantly distancing and wearing masks, decrease the risk of infection (Chu et al., 2020). Additionally, December 26th, 2020, vaccination programs started in Germany. During spring 2021 special approaches to vaccinate homeless people were enrolled.

Compliance with these recommendations is essential for those providing homeless services. They look after vulnerable people who often live with multiple medical conditions. In this context, the extent to which homeless shelters are outfitted with personal protection equipment (PPE) needs to be examined, as well as the continuing availability of services.

1.4 | Research aim

Analysis of these services lacks, for Germany as well as other countries. Therefore, the research questions in the present paper are:

- What changes in services for homeless people have occurred during the pandemic in low-threshold institutions?
- How have the (sociodemographic) characteristics of guests changed during the pandemic?
- What challenges do service institutions for homeless people face regarding staffing?
- What challenges do service institutions for homeless people face regarding hygiene concepts?

2 | METHODS

An online-based cross-sectional descriptive study was conducted to answer the research questions.

2.1 | Sample

The sample included all identified service institutions for homeless people in Berlin, Cologne, Frankfurt, Hamburg, and Munich, the five most populous cities in Germany. Because no complete register of service institutions for homeless people exists, a search was first conducted online and via service brochures and snowball sampling. The resulting sample included all low-threshold service institutions for homeless people, regardless of the services offered (e.g., counseling services, soup kitchens, shelter, medical services, street work). Excluded were services offered by official health authorities. In total, 244 institutions were identified. Each institution completed the study questionnaire just once.

2.2 | Data and data collection

The questionnaire included five significant sections. The first collected data about the institution itself (city, services offered and usual operating hours). The second section investigated changes during the pandemic (e.g., whether the institution offered fewer, the same number of, or more places than before the pandemic). The third section collected changes in the characteristics of guests, such as the number of guests and their health conditions, age, and sex. This section also asked about guests' moods (e.g., fear, aggression, distress). The fourth section evaluated changes in staffing, both employees and volunteers; the development and implementation of hygiene concepts; the stock of PPE such as face masks; and concepts of social distancing and disinfection. Finally, the last section investigated the handling of guests who had a positive PCR test. This included collaboration with public health officials, as well as the testing procedure and isolation possibility. The final question was left open to allow service institutions to provide additional information.

Data collection began December 8, 2020, and ended January 8, 2021. During this time, the second wave of the pandemic occurred in Germany and the federal government instituted a lockdown beginning December 16. This did not include services for homeless people, which were allowed to remain open.

Data were collected using the online survey tool QUAMP, owned by the university. The link to the questionnaire was sent via email. Reminders were sent after seven, 14 and 21 days.

General data protection regulations (GDPR) of the European Union (EU, 2021) were followed, for example, anonymized data collection or clear information about data processing. All service institutions received written information about the survey, including its aim, contact person and data protection procedures. Only people who consented to participate were directed to the questionnaire.

2.3 | Data analysis

Descriptive statistics, such as median and mode, were used to assess the situation of service institutions. Spearman-Rho was used to analyze correlations among ordinal variables. In addition, Data analysis

TABLE 1 Services offered to homeless people

Service	n (%)
Counseling	91 (77.8)
Food services	78 (66.7)
Showers	73 (62.4)
Clothing	69 (59.0)
Daytime stays	51 (43.6)
Overnight stays	47 (40.2)
Medical treatment	34 (29.1)

Note. Total $n = 117$; multiple answers were possible.

was conducted using SPSS Version 27 for Mac (IBM, 2020). Open-ended questions were clustered. Clusters were counted and analyzed as quantitative data. The significance level was set at $p \leq .05$.

3 | RESULTS

After 244 service institutions were contacted, 12 were not included in the sample (four because they were not low-threshold services and eight due to incorrect email addresses). The total sample included 232 service institutions. Of these, 135 institutions responded to the study request. However, 18 did not complete the questionnaire. Therefore, the sample includes data from 117 institutions, a response rate of 50.4%. The participating institutions were predominantly in Berlin ($n = 59$; 50.4%). Other institutions were in Hamburg ($n = 19$; 16.2%), Cologne ($n = 15$; 12.8%), Munich ($n = 12$; 10.3%), and Frankfurt ($n = 11$; 9.6%).

3.1 | Low-threshold services institutions

Participating service institutions offered a variety of tasks. On average (median), they offered four service tasks (min. $n = 1$; max. $n = 7$). The detailed description is shown in Table 1. Counseling was the service offered most often, followed by food services. Medical treatment was the most rarely offered service.

Operating hours during the pandemic were somewhat different from before the pandemic. During the pandemic, three institutions that had previously offered daytime service were closed during the day. In addition, two service institutions offered service 24/7 during the pandemic instead of only at night. Most institutions in the sample ($n = 73$; 62.4%) answered that they had reduced their capacity for guests, although $n = 3$ (2.6%) institutions increased their capacity. Other institutions offered the same capacity or did not answer this question (Table 2).

In most cases, homeless people could be looked after within the institution ($n = 89$; 76.1%). However, in $n = 14$ (12.0%) institutions, guests had to stay outside the institution, and $n = 8$ institutions (6.8%) forwarded people to other service points. During the pandemic, the cost for services provided increased in $n = 83$ institutions

TABLE 2 Operating hours of service institutions before and during the pandemic

Service	Before pandemic; n (%)	During pandemic; n (%)
During the day	71 (60.7)	67 (57.3)
At night	27 (23.1)	26 (22.2)
24/7	19 (16.2)	21 (17.9)
Closed	-	3 (2.6)

Note. Total n = 117; multiple answers were possible.

(70.9%), decreased in n = 5 (4.3%), and did not change in n = 22 (18.8%). To recoup costs, most institutions cited additional donations (n = 56, 47.9%) and more effort from the responsible organizations (n = 43; 36.8%). Less reported was additional public funding from federal (n = 35, 29.9%) or community/city (n = 29, 24.8%) governments.

3.2 | Homeless people as guests

During the pandemic, service institutions experienced a range of changes in their numbers of visitors. N = 44 (37.6%) institutions did not see a change in their number of guests, but n = 35 (29.9%) reported a decrease, and n = 30 (25.6%) reported an increase. These changes in the number of guests and capacities for guests do not correlate (Spearman-Rho 0.029; p = .777) and are not associated (chi-square p = .165).

Predominantly, the characteristics of guests did not change during the pandemic. The sex distribution remained stable in n = 99 (84.6%) of the institutions, as did age in n = 100 (85.5%) institutions. However, n = 80 (68.4%) of the participating institutions reported changes in the guests' origins during the pandemic. Among these changes, n = 14 (12.0%) institutions reported more guests from Germany, and n = 16 (13.7%) reported more guests from foreign countries.

Regarding health issues, n = 32 (27.4%) institutions reported increased guests with a need for medical or nursing treatment. In addition,

tion, guests' moods changed during the pandemic to show a higher prevalence of aggression (14.5%), anxiety (24.8%), and desperation (31.6%). Participating institutions did not agree that guests were more relaxed during the pandemic (all, see Figure 1). When asked about compliance, most institutions reported that guests did accept hygiene rules during the pandemic (n = 57, 48.7%), or at least partly (n = 53, 45.3%). Only n = 7 respondents (6.0%) reported that guests were not accepting the rules.

3.3 | Staffing and equipment

During the pandemic, service institutions most often saw no change in the number of staff and volunteers (n = 43, 36.8%), but n = 41 institutions (35.0%) reported fewer staff and volunteers. N = 15 (15.4%) institutions reported an increase in staff and volunteers. In total, n = 55 institutions (47.0%) did not have any problems covering shifts, and n = 50 (42.7%) mostly did not have problems. However, n = 11 institutions (9.4%) reported problems in covering all shifts. There is a significant association between covering all shifts and having lost staff and volunteers (chi-square p = .019). Significantly fewer institutions (n = 12, 29.3%) that had lost staff and volunteers during the pandemic reported being able to cover all shifts without trouble, compared to those that reported having the same number of staff and volunteers (62.8%) or even more staff (44.4%). A smaller number of staff and volunteers is not significantly associated with guests' number of guests (chi-square p = .168).

3.4 | Hygienic safety

The availability of masks is displayed in Table 3. Only n = 3 (2.6%) institutions reported never having enough masks, and n = 63 (53.8%) reported consistently having enough masks. Only n = 39 (33.3%) of the participating service institutions could wash community masks properly (i.e., at 60°C). In nearly every institution, guests had the opportunity to wash (n = 101, 86.3%) or disinfect (n = 106, 90.6%) their hands.

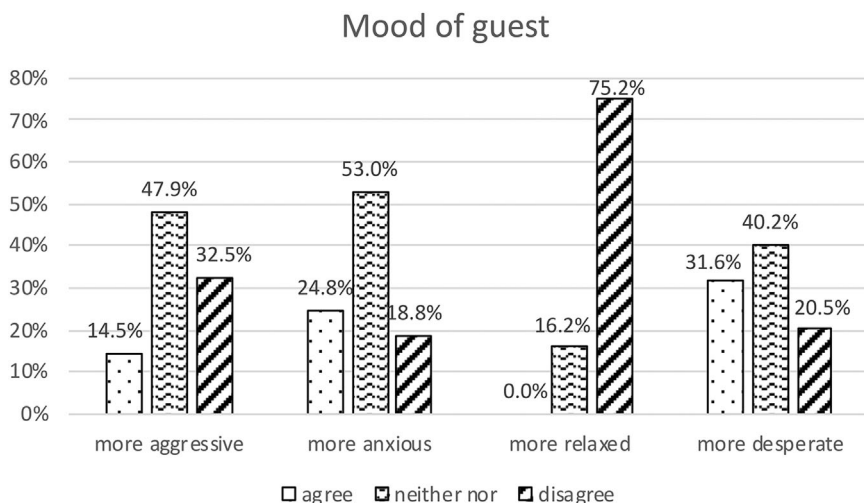


FIGURE 1 Changes in moods of guests. Up to 100% are missing data

TABLE 3 Availability of community masks

	For guests; n (%)	For staff/ volunteers; n (%)
Always	63 (53.8)	106 (90.6)
Mostly	40 (34.2)	6 (5.1)
Neither/nor	4 (3.4)	4 (3.4)
Rarely	7 (6.0)	1 (0.9)
Never	3 (2.6)	0 (0)

Note. Total $n = 117$.

TABLE 4 Availability of personal protection equipment

	Availability during close contact services; n (%)		
	FFP2 masks	Overalls	Gloves
Always	50 (64.9)	29 (37.7)	64 (83.1)
Mostly	13 (16.9)	9 (11.7)	6 (7.8)
Neither/nor	7 (9.1)	2 (2.6)	1 (1.3)
Rarely	6 (7.8)	20 (26.0)	0 (0.0)
Never	0 (0.0)	2 (2.6)	1 (1.3)

Note. Total $n = 77$ institutions; up to 100% are missing data.

In total, $n = 73$ (62.4%) institutions considered their guests sufficiently protected against SARS-CoV-2, and a further $n = 32$ (27.4%) considered guests partly protected.

Asked for wishes to improve hygiene safety, $n = 23$ institutions answered. $N = 9$ of those wished for more or larger facilities, $n = 7$ wished for better compliance from guests, and $n = 7$ answered that there was no way to improve safety.

Nearly all institutions ($n = 106$, 90.6%) could provide community masks for their staff or volunteers (see Table 3). Only $n = 1$ institution (0.9%) said that masks were rarely available, and $n = 0$ said that masks were never available. In $n = 114$ institutions (97.4%), staff and volunteers could wash their hands, and all responding institutions provided hand sanitizer.

Services requiring close contact with guests (e.g., personal hygiene or wound dressing) were generally stopped ($n = 51$, 43.4%) or reduced ($n = 40$, 34.2%). $N = 37$ (31.6%) institutions provided these services in the same way they did before the pandemic. In $n = 34$ (29.1%) institutions, these services were not provided at all. The types provided for institutions that provided PPE, such as filtering face-piece 2 (FFP2) masks, overalls and gloves, are displayed in Table 4. In $n = 22$ institutions (28.6%), all PPE was available, and in $n = 6$ (7.8%), none was available.

$N = 25$ institutions reported the ways they wanted to improve the safety of staff and volunteers. The most common answers were larger/more facilities ($n = 9$), no improvement possible ($n = 7$), and more compliance from guests ($n = 5$).

$N = 33$ institutions (28.2%) reported that health authorities approved their hygiene concepts. Generally, collaboration with health

authorities was considered to be sufficient ($n = 21$, 17.9%) or good ($n = 24$, 20.5%). However, $n = 31$ (26.5%) institutions answered that there was no collaboration.

The main barriers to identifying symptoms in an infected guest were challenges regarding language ($n = 82$, 70.1%), lack of fever thermometers ($n = 48$, 41.0%) and lack of medical staff ($n = 19$, 16.2%). Standard procedures for infected guests were available in $n = 76$ institutions (64.5%).

4 | DISCUSSION

The present study aims to describe service institutions for homeless people during the SARS-CoV-2 pandemic. The relatively high response rate may indicate the importance of this topic.

The included institutions typically provide a variety of services. However, institutions reduced their services and/or capacity during the pandemic, putting homeless people at risk of infection. It can be assumed that this reduction was due to external factors. This corroborates the EU Parliament's (2020) assertion that a SARS-CoV-2 pandemic would exacerbate the homeless population's plight. If service institutions reduced their offerings, options to receive help would be reduced overall.

Data were collected in winter when the necessity of shelters and overnight services is evident. Additionally, medical needs are more seldom addressed in winter. Results show, state and federal governments are not supporting service institutions during the pandemic (even in winter times) to cover additional costs, although public health care is a typical authorities task.

As described earlier, homeless people often suffer from mental health issues (Gaebel & Zielasek, 2015; Yim et al., 2015). In the present study, institutions reported from their point of view, guests show changed aggression and anxiety, desperation and relaxation, indicating that homeless people may suffer more from mental burden during the pandemic than before. This is in line with the findings of a study from India, which found challenging situations for homeless people regarding mental illnesses during the pandemic (Naik et al., 2020).

It remains unclear how facilities deal with the additional challenges of guests and potentially accompanying needs, especially in light of limited services and fewer staff members and volunteers. For a better understanding, those institutions should be studied in depth. The present investigation does not arrive at definite reasons for the lower numbers of staff and volunteers. Is it due to lower capacities or to personal reasons like being at high risk for infection?

Institutions reported an overall good situation regarding community masks for guests and staff/volunteers. However, for close contact services, the availability of overalls was not sufficient. Generally, close contact is a high risk for SARS-CoV-2-infection (Ng et al., 2021). In situations where the staff of service institutions care for homeless people closely, the need for protection is increased. Otherwise, the risk of being infected and transmitting the virus or becoming severely ill is high.

Although looking after homeless people is a public mission, the collaboration between service institutions and health authorities are weak. Especially in a pandemic situation, official regulation should be precise and respond to changes immediately. In contrast, however, service institutions have been left to face challenges alone, without support from authorities. Health authorities should take over these responsibilities and support service institutions to cover additional costs and provide sufficient PPE and larger facilities in order to protect a vulnerable population that has been severely affected by the pandemic.

The acceptance of rules by guest is quite good. However, in future research projects, it should be evaluated, if rules between institutions are the same or not. Furthermore, the current study did not evaluate approaches to ensure the adherence to rules. This information could generally be useful to other institutions.

Language is a major issue to educate people. Taking into account, many homeless people are refugees (BAGW, 2019) and $n = 82$ participating institutions identify challenges regarding language, public health nurses are limited, doing their work. Interpreter and written information about medical issues (e.g., vaccinations) should be available. Using online media (e.g., video calls) could be a way to address this issue.

4.1 | Limitation

The present study comprises various methodological limitations that may effect the generalizability of the results. Firstly, with respect to institution selection, the study sample comprises several urban clusters. Institutions in rural areas may experience different issues. Additionally, due to a lack of a register, we may have missed institutions in the included cities. And finally, a certain number of contacted institutions did not respond. We cannot estimate, if this has an effect on the present results. The assessment of mental burden, for example, anxiety, is limited to a pure observation of staff members. This is not necessarily representing an individual medical diagnosis. The observations could have been influenced by staffs own perception of anxiety etc.

4.2 | Implications for the practice

According to the previously discussed results, public health nurses should improve their role as advocates for the vulnerable group of homeless people. This includes systematic assessment of changes in health status and monitoring of changes in services for the homeless, in the spirit of outreach work based on the premise of providing health education and preventive services. In a homeless-person-centered approach, public health nurse identifies personal goals, for example, learning a German language. They strengthen homeless people to promote their health conditions, for example, by educating them to follow hygiene rules. At the same time, there is a need for special offers for the different population groups within the group of homeless people (e.g., small children and their parents, chronically ill people, etc.).

Regarding people with complex health conditions and/or mental health issues and addictions challenges, it might be necessary, public health nurses organize a multidisciplinary support team to address the needs. Furthermore, it is especially important to include the perspective of the homeless and to reduce the existing research desideratum. The following question should guide action: What special services do they need during a pandemic? All of these findings should be shared with public health agencies or communities. Together, data-driven approaches should be developed to improve services during the pandemic, especially with an eye toward next fall and a possible next wave of infection.

AUTHORS' CONTRIBUTIONS

According to ICMJE guidelines, all authors 1) have made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; 2) have been involved in drafting the manuscript or revising it critically for important intellectual content; 3) have given final approval of the version to be published; and 4) agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. JG: study design, data analysis, manuscript preparation. LK: study design, data collection, manuscript preparation. FN: study design, data collection, manuscript preparation. TAF: study design, data collection, manuscript preparation. All authors read and approved the final version.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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How to cite this article: Gräske, J., Koppe, L., Neumann, F., & Forbrig, T. (2021). Services for homeless people in Germany during the COVID-19-pandemic: A descriptive study. *Public Health Nursing*, 1–7. <https://doi.org/10.1111/phn.13027>