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Original Study

Barriers to Care: Improving Attendance at a Student-Run Free Psychiatry Clinic

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Abstract

Background: One-time clinic attendance and inconsistent follow-up are common in patients experiencing homelessness and those who access care in student-run free clinics (SRFCs). While mental health concerns are prevalent in this population, the consistent follow-up and longitudinal care necessary to improve patient outcomes has many barriers. The primary objective of this study was to assess and address the patient-identified barriers to attendance at a SRFC that operates out of a homeless shelter in Omaha, Nebraska.
Methods: Through a survey, patients indicated if one or more barriers in a list of examples had prevented their attendance in the past. This study also ascertained if patients had social support in place and reviewed demographic information. Between September 2020 and May 2021, 14 psychiatry clinics were held bimonthly with 35 different patients during which each patient was requested to complete a survey. Of the 35 requested, 13 patients completed the survey.
Results: Of the 13 patients, 62% reported at least one barrier to care. Primary barriers patients experience are forgetting appointment time (38%), feeling so poorly they don't feel like going (31%), and having problems with transportation (31%). Although not statistically significant, there was a trend of having a case manager (OR = 0.2143, 95% confidence interval [CI] 0.0136 - 3.3698) or having at least two social support systems (OR = 0.2143, 95% CI 0.0136 - 3.3698) decreased the odds that patients would report two or more barriers to care.
Conclusions: Over half of the participants reported at least one barrier to care. Although not statistically significant, there was a trend that having a case manager and social support reduced the odds of patients reporting barriers. We suspect that creating stronger relationships with patients directly through patient liaisons and strengthening relationships with case managers will improve communication and decrease no-show rates.

Introduction

According to a 2020 United States Department of Housing and Urban Development report, 2,404 people in Nebraska experience homelessness on any single day.[1] Omaha is the largest city in Nebraska and the Siena Francis House (SFH) is Nebraska's largest homeless shelter. In 2019, SFH served 2,179 patrons, of which nearly 500 reported a disabling condition at entry including mental illness and substance use disorder. Homelessness and its connection with mental illness is well described, affecting as much as 26% of the homeless population.[2-4] Those experiencing homelessness with mental illness have been found to have worse health outcomes compared to homeless individuals without mental illness, particularly if they have a history of psychiatric hospitalization.[5] For mental healthcare in this population, continuity of care has been associated with decreased symptom burden and hospitalizations, and improved social functioning.[4,6]

The Magis Clinic is a Student-Run Free Clinic (SRFC) operating out of SFH run by Creighton

University School of Medicine volunteers. Since 2004, Magis has provided acute healthcare services to all people, regardless of housing or insurance status, though most are experiencing homelessness. In response to the high prevalence of mental illness in this population, the clinic expanded to include psychiatry services in 2007. The clinic is open bimonthly, and appointments are made via case manager referrals and self-referral, though walk-ins are accepted if time permits. The team includes a practicing psychiatrist and pharmacist, medical and pharmacy students, and three medical student "patient liaisons" who address continuity of care and non-medical needs.

Prior to the start of this study, the patient liaison team asked 84 psychiatry patients, “do you foresee any barriers to attending future appointments?” between January 2017 and January 2019. 100% of the respondents said “no”. However, in 2018, the appointment attendance rate (i.e., patient was scheduled and attended appointment) was 50% (20 clinics; 90/180 appointments). That rate dropped to 47% in 2019 (23 clinics; 95/203) and in 2020 remained at 47% (13 clinics; 56/119). This current study was created given that patients were reporting no obstacles to appointment attendance, yet attendance rates are consistently less than 50%.

Many studies have sought to identify obstacles to care for the homeless population. In a 2015 study, O’Toole et al. concluded that the availability of free care was not enough to engage homeless veterans in healthcare, but an outreach program was imperative for out-of-treatment patients.[7] Identified barriers to care in their patient population included not knowing how and/or where to access care, as well as the patient’s perception that they do not need care. Additionally, previous studies have demonstrated lack of social support networks and poorer overall mental health are implicated in worse health outcomes for the homeless population.[8,9] The perception of a strong therapeutic relationship between patients and their healthcare providers, medical staff, and case managers have been correlated with greater patient-reported quality of life and sense of social support.[10-12] Literature detailing these effects in free clinics specifically is lacking, though a 2006 study conducted in Paris, France found staff-patient relationships were influential upon free clinic attendance.[13]

The purpose of this study was to identify patient-perceived barriers to care at a SRFC. We had two objectives: 1) to evaluate obstacles to care for persons experiencing homelessness and mental health concerns; and 2) to implement changes to improve patient clinic attendance, continuity of care, and health outcomes. The study endpoint was a consensus of targetable barriers to clinic attendance. The coinciding coronavirus disease 2019 (COVID-19) pandemic presented a unique opportunity to collect data on patient attendance at a SRFC during a pandemic.

Methods

Study Participants

The Creighton University Institutional Review Board approved the study. Adult patients (legally 9 years or older in Nebraska) who were treated at the Magis Psychiatry Clinic and consented to participation were included. Non-English-speaking patients are not heavily represented in the clinic population, anecdotally around three patients per year, and translation services were not readily available for each clinic. As such, only English-speaking patients were included. Patients were asked once for their participation during their appointment. Completion or declination of the survey was noted to prevent repeat requests. Patients were reassured that their participation would not interfere with their care.

Survey Administration

Anonymous surveys were administered from September 2020 to May 2021, during which we held 14 clinics and saw 35 individual patients. Each patient was invited to complete a 15-question survey on paper and informed consent was obtained. Non-response bias was addressed by having case managers administer surveys to patients who missed appointments. Survey administrators explained the purpose and structure of the survey and remained available to clarify questions throughout the appointment.

The Survey

In addition to elucidating barriers to attendance, this survey served as a quality improvement

Table 1. Patient perceived challenges to attending appointments and sources of social support questions

Survey Item	Response Choices
Are there any barriers or challenges that prevent you or someone you know from consistently attending your Magis Psychiatry Clinic appointments? Please circle all that apply.	a. I forget when my appointments are b. I forget where my appointments are c. I have trouble with transportation d. My mood is sometimes so bad that I just don't feel like going e. My substance use disorder prevents me from keeping a stable routine with my medical and mental health care f. I have a chronic condition that interferes with my ability to take care of my mental health g. I've been connected to other resources in the Omaha area and no longer need my Magis Psychiatry Clinic appointments h. I do not think I need my Psychiatry Clinic appointments i. My Magis Psychiatry appointments take too long j. Other (*please specify*):
Do you feel that you have social support (family, friends, etc.) that you can rely on? Social support, for the purpose of this study, is defined as: a feeling that there is a person (or people) you can turn to and depend on in times of need. I feel supported by (circle all that apply):	a. Family b. Friends c. Doctors/Medical staff d. Case manager e. Pets f. Support/therapy program (*please specify*): g. Other (*please specify*):

Table detailing the question options offered for patients in the survey administered at Magis Psychiatry Clinic.

Table 2. Participant demographics

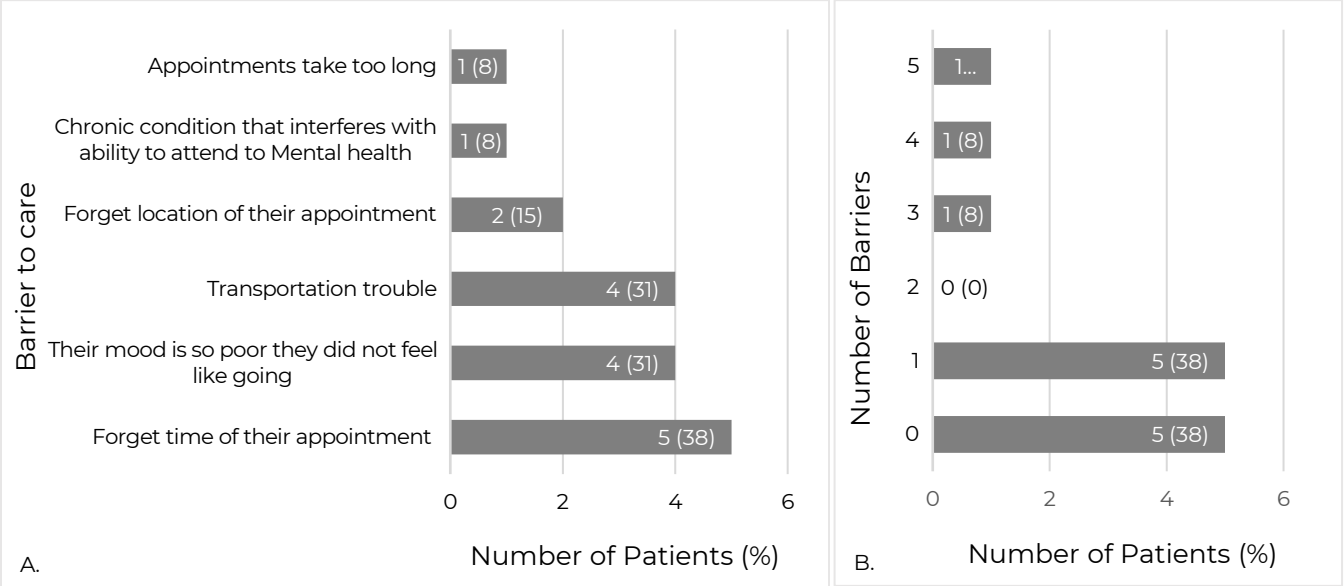
Characteristic	N (%)
Age range	
19-24	0 (0)
25-29	1 (8)
30-39	2 (15)
40-49	5 (39)
50-59	2 (15)
60+	3 (23)
Sex	
Male	10 (77)
Female	3 (23)
Homelessness status	
Yes	9 (69)
No	4 (31)
Case manager*	
Yes	8 (62)
No	4 (31)
Unanswered	1 (8)
Current employment status	
Employed	3 (23)
Unemployed	10 (77)

Table detailing the age, gender, homelessness status, case manager assigned, and current employment status of research participants at the Magis Psychiatry Clinic.
**Total summates to 101% due to rounding.*

project for the Magis Psychiatry Clinic. Previous studies demonstrated that individuals experiencing homelessness with concomitant mental health disorders are at increased risk for other chronic health problems.[6,10] Barriers identified were forgetting appointments, trouble with substance use, other unmet medical needs, and lack of social support.[8-10,14] This study sought to understand what role these barriers played in our patient population. The survey is of original design and the questionnaire was based on literature review and input from SFH case managers and Magis psychiatrists. Case managers are available for all SFH patrons who have stayed for two or more weeks and can link patrons with a variety of resources. They are intimately familiar with the medical and non-medical needs of our patient population, based on their own experiences with their clients/our patients. The survey consisted of free-response questions asking participants how long they have been a patient at our clinic, what keeps them coming back, and ideas for improvement. We queried interest in waiting room activities including coloring, meditation and mental health/medication education.

Participants were also asked to choose from a list of perceived challenges that may have prevented them from attending appointments and

Figure 1. Patient-identified barriers



A) Patient-identified barriers to care. B) Number of barriers.

to select whom they felt were sources of social support (Table 1). Patients could select as many options as were applicable. Finally, we collected demographic information including age range, gender, housing and employment status, and if they had a case manager or other chronic diseases.

Statistical Analysis

We assessed statistical differences by calculating odds ratios with MedCalc statistical software (version 20.115, MedCalc Software Ltd, Belgium) using a 95% confidence interval (CI), $\alpha = 0.05$. Additionally, descriptive analysis was conducted by calculating frequency of responses.

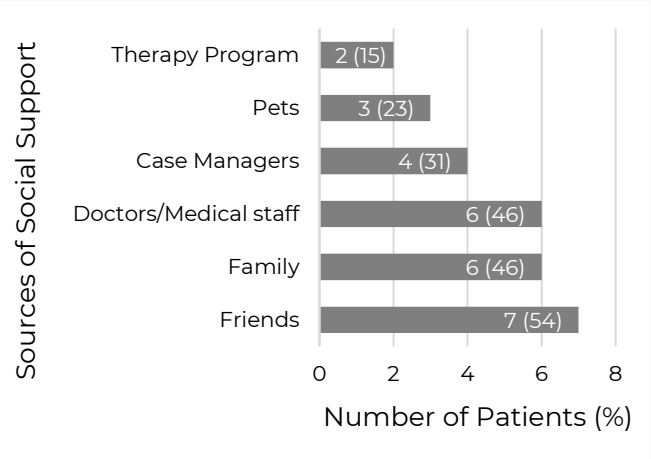
Results

During the nine-month period, 35 individual patients were treated at the Magis Psychiatry Clinic and 13 responses were received (38% response rate). Age ranges, instead of participant exact age, were recorded per Institutional Review Board guidelines. All patients who participated were above 25 years old, the most common age range of 40-49. Of the 35 participants, 69% were homeless and 77% were unemployed. Participant characteristics are summarized in Table 2.

For the primary objective, researchers investigated patient-identified barriers to clinic attendance. The data suggests that the primary barriers experienced by this clinic population are forgetting appointment times (38%), feeling too poorly to attend (31%) and having transportation issues (31%) (Figure 1A).

Eight of 13 patients reported having at least one barrier to care, yet five patients indicated no barriers (Figure 1B). Interestingly, 80% of those indicating no barriers reported homelessness. The number of reported barriers was further compared with other variables including having a case manager and social support. To perform simple statistical testing comparing patients with and without these resources, responses were stratified into categories of those who reported many barriers (i.e., two or more barriers) and those who reported zero to one barrier. These findings were not statistically significant; however, there was a trend that having a case manager decreased the odds that patients would report many barriers to care (OR=0.214, 95% CI 0.014-3.370). Similarly, in comparing social support and number of barriers, having at least two social support systems decreased the odds that patients would report two or more barriers (OR=0.214, 95% CI 0.014-3.370). Friends, family and doctors/medical staff were indicated most frequently by participants (Figure 2). We also offered

Figure 2. Patient-identified sources of social support



a free-response social support option – no participants utilized this.

Within the second objective, activities during waiting time were queried. Of the 35 participants, 82% indicated interest in music, coloring, and information sessions about medications and psychiatric conditions. Additionally, we gathered qualitative information about what keeps patients coming back to clinic, what could be improved, and suggestions for how we may reduce barriers to attendance. Patients expressed that they return to clinic because they receive help, support and medication refills, all in a convenient location. They appreciate volunteers taking an interest in them and making them feel comfortable. Participants suggested shorter wait times, improved scheduling, appointment reminders, and providing amenities like coffee could improve the clinic. Only four participants offered a response about how clinic could reduce barriers to attending appointments: better communication, printed reminders with their next appointment date, transportation services, and paying patients to attend appointments.

Discussion

Using these results, the patient liaison team plans to implement a variety of changes to our intake process to boost clinic attendance. Our study identified 62% of participants indicating at least one barrier to care and 23% indicating two or more barriers to care. Due to the benefits of continuity of care for patients with mental health concerns, our study demonstrated the need to adapt our clinic to address patient-identified barriers.

O'Toole et al. described interventions to improve primary healthcare utilization in their patient population of homeless veterans in Rhode Island and Massachusetts.[7] The most effective intervention was a Personal Health Assessment in which a nurse asked standardized questions about patient health behaviors and past medical history, then presented a summary of the findings to the patient via motivational interviewing. Inspired by this, we have implemented a new intake form evaluating social aspects of patient health including medical and social needs, as well as needs that must be met to leave homelessness (i.e., becoming more work ready, economic self-sufficiency). We hope this will provide a more comprehensive understanding of how we may best serve each individual patient.

Further, Larson's 2006 study in Paris, France highlighted the importance of the medical staff-patient relationship in clinic attendance.[13] With our survey, we assessed staff-patient relationships with two questions: what keeps patients coming back to clinic (free-response) and including "doctors/medical staff" as an option in the question about sources of social support. Key words identified in the free-response answer included "support", "help", and "wellbeing". However, only 46% of participants indicated doctors/medical staff as a source of support. We realize that continuity of care is difficult in our clinic since it is run by volunteers and patients may see different psychiatrists and student teams each visit. The patient liaison team was created to help with the sense of continuity and to build rapport, but survey results indicate room for improvement. To target this, the patient liaisons implemented the thorough personal health assessment described above. Through discussion with the patient about their goals and individual circumstances as informed by this assessment, we hope to build stronger patient-medical staff partnerships.

A 2016 Florida study identified continuity of care and affordable transportation as ways to improve medical care at free clinics.[15] Similarly,

participants indicated we could improve on transportation, scheduling, and wait times. Our clinic has now implemented UberHealth (2022, Uber Technologies Inc., San Francisco, CA), in addition to bus passes funded by our clinic. We also hope to remediate long wait times during patient visits with mental wellness activities. A 2013 paper on the time spent in the waiting room identified key interventions that are applicable to our clinic: distributing the validated Patient Health Questionnaire-9 to assess for depression, providing patients with prompts to list appointment goals, and adding patient education materials to the waiting room including wall posters and pamphlets.[16] We plan to integrate these interventions into our clinic.

In our study, 38% of patients identified forgetting appointment time as a barrier to care. Currently, appointment reminders are performed via phone or email the week of their appointment, depending on the contact information provided, with limited success. The patient liaison team has met with 126 different patients since its inception in 2017, and as a routine intake question, we requested their contact information. This information was not collected as part of the current survey but was recorded throughout previous encounters. Only 29 of 126 patients provided a phone number, 18 indicated that we could contact them via their case manager, and 63 did not have contact information to provide or preferred not to share this information. This is in contrast with other clinics that work with a similar patient population, including a 2017 study in Virginia that found 89% of their patrons had a cell phone and 77% of those with cell phones expressed interest in appointment reminders.[17] Since phone reminder calls have not been effective for our patients, our goal is to strengthen Magis's relationship with case managers to improve appointment communication by holding quarterly meetings with the case manager team. Additionally, it may be difficult for patients and case managers to remember when appointments are given our biweekly clinics. To combat this, we plan to schedule clinics on the first and third Saturdays of every month, so clinic dates are more standardized.

Although the odds ratios were not statistically significant and we had a small number of participants, results from this study provide unique insight into patient-perceived barriers in receiving free mental healthcare at a SRFC during a global pandemic. We observed a trend that having a case manager and social support reduced odds of reporting two or more barriers to care. As described above, we are enacting several improvements to our clinic. By implementing a personal health assessment administered by the patient liaisons, we hope to be a source of social support for our patients. Since forgetting time and place of appointments was so prevalent, we plan to strengthen our relationship with case managers to improve communication with patients. Finally, we plan to implement mental wellness activities while patients wait for their appointments.

Study limitations include a limited pool of participants due to the COVID-19 pandemic and difficulty recruiting and maintaining patients experiencing homelessness due to the sometimes-transient nature of this population. By conducting this study during a pandemic, we offer a unique insight into persistent patient care barriers despite a pandemic. And it was essential to conduct this study among the population we intend to utilize our results to serve. Surveys were administered during appointments, and though we attempted to address non-response bias by case managers administering surveys, no responses were received this way. Therefore, these results cannot speak to the barriers of individuals who are not utilizing mental healthcare but are important still for those engaged in care currently. Additionally, though patient liaisons were present during survey administration and clarified questions as needed, we could not be certain that the questionnaire was fully understood. Similarly, since we could not rule out cognitive impairment caused by mental illness as an influential variable and a cognitive functioning assessment was not part of this study, further investigation is recommended. Finally, since the study survey was originally developed, it is not a validated measure which can affect the validity of results, but this study is an important starting data point for assessing barriers to care at psychiatric SRFCs.

Results from this study provide tangible to-do's for other SRFCs, especially ones that similarly

serve large homeless populations. For example, coordinating transportation for patients and having routine clinic dates/times to make access to care easier.

Disclosures

The authors have no conflicts of interest to disclose.

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