The Prevalence of Psychiatric Disorders and Limitation of Healthcare Utilization among the Homeless Residing in Shelters in Bangkok

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Abstract

The objectives were to investigate the prevalence of psychiatric disorders and limitation in healthcare utilization among the homeless residing in shelters in Bangkok. The materials include Mini International Neuropsychiatric Interview - Thai version, demographic questionnaires, and semi-structural interview. The data was collected by an individual interview. The subjects were 116 homeless people. The descriptive statistical analysis was used for parametric data such as demographic characteristic and psychiatric diagnosis. Chi-square test was used to study the correlation between psychiatric diagnosis and subject's characteristics. The causes that prevented subjects from utilizing healthcare services were categorized. The result demonstrated 61.2% of the participants suffered from at least one psychiatric disorder. The common psychiatric problems

were the psychotic disorder (22.4%), alcohol dependence (21.6%), and major depressive episode (20.7%). Those who were rough sleepers before utilizing the shelter were more likely to be diagnosed with psychotic disorders (p-value <0.001) and being diagnosed with more than one disorder (p-value 0.027). The thematic analysis suggested that half of the participants accepted that there were several causes that prevented them from using the healthcare services: 1) the issues of the expense of medical fees and healthcare coverage; 2) the problem of transportation and traveling costs to services; 3) quality of the service or the feeling of receiving substandard care; and 4) unwillingness to serve among the healthcare providers. To conclude, the prevalence rates of psychiatric disorders among sheltered homeless are greater than in the general population. An urgent improvement of healthcare as well as mental healthcare availability and accessibility for this population is required.

Keywords: Homeless, Psychiatric disorders, Mental illness, Mental healthcare

Introduction

Over a thousand people are living on the streets in the city of Bangkok, while over a hundred are residing in shelters (Pitukthanin et al., 2016). A myriad of studies have demonstrated that the prevalence of mental disorders among the homeless outnumber the age-matched general population, in the western countries. Predominantly, they are more likely to suffer from psychotic illnesses and personality disorders than their counterparts as well as alcohol dependence and drug dependence, which are considerably common psychiatric problems among this population (Beijer & Andréasson, 2010; Fazel et al., 2008; Pascual et al., 2008). In addition, the higher incidence of psychiatric illness, especially substance abuse disorders and alcohol addiction, as well as physical health conditions, are related to premature mortality among the homeless (Chang et al., 2011; Nielsen et al., 2011).

Being homeless is a great challenge to health, however, accessing the healthcare system can be even more problematic. Accessing health services can be limited as homeless people have other priorities that compete with their need for health care, in order for them to survive. As well as, lacking medical coverage, they may face being treated with sub-standard care, or they may have a feeling of disrespect by health care providers which can impede the homeless seeking medical services (Daiski; 2005; Grech & Raeburn, 2019; Kushel et al., 2001; Rae & Rees, 2015; Viwatpanich, 2015; White & Newman, 2015).

In Thailand, the recent prevalence study of psychiatric disorders among the homeless, who received food from meal program, in a place next to the Bangkok Metropolitan Office, has shown that over three-fourth

of participants (76.1%) met the criteria of major or minor psychiatric disorders (Awirutworakul et al., 2018). The prevalence of psychiatric disorders are substantially higher than in the general population, which stood at around just one-tenth (9.3%) (Sooksompong et al., 2016). These psychiatric disorders included Major Depressive Disorder, Psychotic Disorder, Alcohol and Drug dependence, Anxiety Disorder and Manic-Depressive Disorders. Furthermore, one participant may be diagnosed with more than one disorder (Awirutworakul et al., 2018; Sooksompong et al., 2016). This is the point of the prevalence of mental disorders in homeless people who are living in the public area. We still don't have any data of the prevalence of psychiatric disorders, in the group of homeless who live in private and public shelters. By being closer to aid from non-governmental organizations, or the service provider of the State, the result may vary from the previous studies, and the limitation of receiving healthcare services in sheltered homeless has not yet been revealed.

The primary objective of this study is to investigate the prevalence rate of psychiatric disorders among the homeless who reside in shelters in Bangkok, Thailand. The secondary objective is to investigate and understand their limitations and barriers in accessing the healthcare facilities. These aims are to inform the h ealthcare providers about the homeless' psychiatric needs and barriers to utilizing healthcare services, in order to ameliorate the mental healthcare services for this undeserved population.

Materials and methods

To calculate the sample size, the authors use population of the sheltered homeless from the recent homeless population survey to estimate the appropriate sample size, the number of the sheltered homeless was 129 (Pitukthanin et al., 2016). The calculation is shown as followed.

$$n = \frac{NZ^2}{4NE^2 + Z^2}$$

Whereas,

n : the sample size

N : Total homeless population resided in shelters

N : 129

Z : Confidential Interval (CI 95%)

Z : 1.96

E : Sampling error set at 0.05

$$n = \frac{129(1.96)^2}{4(129)(0.05)^2 + (1.96)^2}$$

$$n = 96.56$$

Then, 20 percent of the result was added into the sample size in case of missing data or termination, therefore, the suitable sample size for the study was 116 subjects in total.

The data was collected from the residents of two shelters in Bangkok. The first one is a private shelter, runs by a non-profit organization. The second one, is a public shelter which is under the supervision of the Department of Social Development and Welfare, Ministry of Social Development and Human Security. The reason to include only two shelters in this study was that there were only two homeless shelters which allowed the homeless to reside during the data collection phase. Another shelter which was run by the Bangkok Metropolitan Office was discontinued during that time. The distinctions between these shelters were that the residents in the private shelter were responsible for paying their bills, and seemed to be long-term inhabitants. While in the public shelter, the resident seemed to be temporary inhabitants who await the referral process.

This study was applied to a selective sampling, the targeted subjects, were the homeless, aged over 18 years, had good communication skills in Thai, who received the shelter service, and voluntarily joined the study. The author performed this research by requesting permission, in person, from each subject, prior to each interview. The data was collected at the shelters during June 2019 through November 2019. This study was approved by the Institutional Review Board, Faculty of Medicine Siriraj Hospital (SIRB), Mahidol University (SIRB ID 911/2561(EC2)).

The Mini-International Neuropsychiatric Interview (MINI) was administered along with demographic questionnaires and a semi-structural interview on limitations in utilizing healthcare service. The MINI is a structural psychiatric diagnostic interview according to the criteria of

Diagnostic and Statistical Manual, Fourth Edition (DSM-IV) and International Classification of Disease, Tenth Edition (ICD-10). This was developed to lessen the time spent in the clinical interview, with in brief, but valid and reliable structural interviews that could be suitable for epidemiological studies, with under 30 minutes of administration. It covered up to 17 Axis one disorders, which included common categories of psychiatric disorders (Kittirattanapaiboon & Khamwongpin, 2005; Sheehan et al., 1998). The demographic questionnaires reviewed age, gender, duration of homelessness, places used to reside prior to utilizing shelters, employed status, income and criminal history. Finally, a semi-structural interview was administered on the topics of healthcare-seeking behaviors and limitations on utilizing healthcare services. The estimated overall duration to complete the interview was 45-60 minutes per subject.

The descriptive statistical analysis was used to calculate the frequencies and percentages of each demographic characteristic and each psychiatric diagnosis. The data from semi-structural interview was categorized into a thematic report along with a descriptive statistic. Pearson's Chi-square test was used to show the correlation between psychiatric disorders with various demographic characteristics. The differences were considered with the statistical significance of p-value less than 0.05. The psychiatric disorders were classified into 5 categories according to the DSM-IV prior to investigate the correlation (American Psychiatrist Association, 2000). 1) The substance related disorders include alcohol dependence, alcohol abuse, substance dependence, and substance abuse; 2) The psychotic related disorders include psychotic disorder; 3) The Bipolar disorders include manic and hypomanic episodes;

4) The depressive disorders include major depressive episode and dysthymia; 5) The anxiety disorders include panic disorder, agoraphobia, social phobia, obsessive-compulsive disorder, post-traumatic stress disorder, and generalized anxiety disorder. All statistical analysis was analyzed with the Statistical Package for Social Sciences (SPSS).

Results

The total numbers of 116 homeless participants in this study were interviewed individually by the author. This included 42 participants (36%) from the private shelter, and 74 participants (64%) from the public shelter.

Table 1 Demographic data of homeless residing in shelters in Bangkok

Demographic characteristic	Total Sample (n=116)	Private Shelter (n=42)
	n (%)	n (%)
Gender		
Male	87 (75)	22 (52.4)
Female	29 (25)	20 (47.6)
Age (years), mean ± SD	51.46±14.50	54.24±15.48
18-39	23 (19.8)	5 (11.9)
40-59	54 (46.6)	20 (47.6)
≥ 60	39 (33.6)	17 (40.5)
Duration of homelessness		
< 1 year	51 (44)	7 (16.7)
> 1 years, < 5 years	21 (18.1)	11 (26.2)
> 5 years, < 10 years	11 (9.5)	6 (14.3)
> 10 years	33 (28.4)	18 (42.8)
Places resided prior to using shelter		
Shelter	69 (59.5)	42 (100)
Public space (sleeping rough)	36 (31)	0 (0)

Demographic characteristic	Total Sample (n=116)	Private Shelter (n=42)
	n (%)	n (%)
Others	11 (9.5)	0 (0)
Employment status*		
Any job	50 (43.1)	30 (71.4)
Employee	28 (24.1)	20 (47.6)
Self-employed	17 (14.7)	5 (11.9)
Both jobs	5 (4.3)	5 (11.9)
None	65 (56)	12 (28.6)
Income*		
Any source of income (included state pension)	80 (69)	39 (92.9)
Earning from job	50 (43.1)	30 (71.4)
No income	35 (30.2)	3 (7.1)
State pension scheme*		
Subsistence allowance for elders	30 (25.9)	15 (35.7)
Subsistence allowance for disabled	16 (13.8)	4 (9.5)
Subsistence allowance for the poverty	32 (27.6)	22 (52.4)
Any involvement in crime	27 (23.3)	7 (16.7)

**One participant may give multiple responses.*

The demographic characteristic is shown in the Table 1, includes gender, age, duration of homelessness, places used to reside prior to utilizing shelters, income, and employment status, and any history of criminal involvement. The majority of participants were males (75%) between 40 to 59 (46.6%) years of age. The mean age was 51.46±14.50 years, range from 18-86 years old. Approximately, half of the participants were homeless under 1 year, but, roughly one-third was homeless over 10 years. Over half of them were unemployed, and while one-fourth depended on Governmental pension scheme. Almost one-third was

unable to earn any income. Only 43.1 percent of the participants earned money from jobs.

Table 2 Prevalence of psychiatric disorders among homeless people residing in shelters in Bangkok

Psychiatric Diagnosis	Total Sample (n=116)	Private shelter (n=42)	Public shelter (n=74)
	n (%)	n (%)	n (%)
At least one psychiatric disorder (lifetime prevalence)	71 (61.2)	21 (50)	50 (67.6)
Single diagnosis (excluded suicidality)	27 (23.3)	12 (28.6)	15 (20.3)
Double diagnosis (excluded suicidality)	19 (16.4)	3 (7.1)	16 (21.2)
Tripple diagnosis (excluded suicidality)	11 (9.5)	3 (7.1)	8 (10.8)
Multiple diagnosis (exclude suicidality)	14 (12.1)	3 (7.1)	11 (14.9)
More than one disorder	44 (37.9)	9 (21.4)	35 (47.3)
Depressive disorders			
Major depressive episode (current, 2 weeks)	24 (20.7)	5 (11.9)	19 (25.7)
Major depressive episode w/ melancholic features (current)	18 (15.5)	3 (7.1)	15 (20.3)
Major depressive episode (recurrent)	12 (10.3)	4 (9.5)	8 (10.8)
Dysthymia (current, past 2 years)	4 (3.4)	3 (7.1)	1 (1.4)
Bipolar disorders			
Manic episode (current)	5 (4.3)	1 (2.4)	4 (5.4)
Manic episode (past)	2 (1.7)	2 (4.8)	0 (0)
Hypomanic episode (current)	0 (0)	0 (0)	0 (0)
Hypomanic episode (past)	12 (10.3)	5 (11.9)	7 (9.5)
Anxiety disorders			
Panic disorder (current, previous month)	6 (5.2)	0 (0)	6 (8.1)

Psychiatric Diagnosis	Total Sample (n=116)	Private shelter (n=42)	Public shelter (n=74)
	n (%)	n (%)	n (%)
Panic disorder (lifetime)	7 (6.1)	1 (2.4)	6 (8.1)
Agoraphobia (current,)	13 (11.2)	2 (4.8)	11 (14.9)
Social phobia (current, previous month)	12 (10.3)	4 (9.5)	8 (10.8)
Obsessive-compulsive disorder (current, previous month)	8 (6.9)	2 (4.8)	6 (8.1)
Post-traumatic stress disorder (current, previous month)	6 (5.2)	0 (0)	6 (8.1)
Generalized anxiety disorder (current, past 6 month)	4 (3.4)	0 (0)	4 (5.4)
Substance-related disorders			
Alcohol dependence (past 12 months)	25 (21.6)	6 (14.3)	19 (25.7)
Alcohol abuse (past 12 months)	6 (5.2)	1 (2.4)	5 (6.8)
Substance dependence (past 12 months)	11 (9.5)	1 (2.4)	10 (13.5)
Substance abuse (past 12 months)	1 (0.9)	0 (0)	1 (1.4)
Psychotic and related disorders			
Psychotic disorder (current)	15 (12.9)	3 (7.1)	12 (16.2)
Psychotic disorder (lifetime)	26 (22.4)	4 (9.5)	22 (29.7)
Mood disorder w/ psychotic features (current)	5 (4.3)	1 (2.4)	4 (5.4)
Mood disorders w/ psychotic features (lifetime)	9 (7.8)	2 (4.8)	7 (9.5)
Eating disorders			
Anorexia nervosa (current, past 3 months)	2 (1.7)	1 (2.4)	1 (1.4)
Bulimia nervosa (current, past 3 months)	0 (0)	0 (0)	0 (0)
Personality disorders			
Antisocial personality disorders (lifetime)	2 (1.7)	1 (2.4)	1 (1.4)
Suicidality			
Any suicidal risk	36 (31.0)	12 (28.6)	24 (32.4)

Psychiatric Diagnosis	Total Sample (n=116)	Private shelter (n=42)	Public shelter (n=74)
	n (%)	n (%)	n (%)
High suicidal risk	7 (6.0)	2 (4.8)	5 (6.8)
Medium suicidal risk	0 (0)	0 (0)	0 (0)
Low suicidal risk	29 (25.0)	10 (23.8)	19 (25.7)

The prevalence of psychiatric disorders among the homeless resided in shelters in Bangkok is shown in Table 2. Over 60 percent of the total participants were diagnosed with at least one psychiatric disorder. The prevalence rate is relatively high in both private and public shelter (50.0% and 67.6% respectively). In contrast, the prevalence of any psychiatric comorbidity is higher in the public shelter (47.3% compared to 21.4%). The common psychiatric disorders included psychotic disorders (lifetime) (22.4%), alcohol dependence (past 12 months) (21.6%), and major depressive episodes (current, 2 weeks) (20.7%). The suicidal risk was also high among the participants (31.0%) and 6.0% accounted for critical suicidal risk.

Table 3 Correlation between the psychiatric diagnosis and demographic characteristics

Demographic characteristics	At least one Psychiatric Disorder	More than one Psychiatric Disorder	Any Substance-related Disorders	Any Psychotic Disorders	Any Depressive Disorders	Any Anxiety Disorders
	(*p*-value)	(*p*-value)	(*p*-value)	(*p*-value)	(*p*-value)	(*p*-value)
Shelter	0.062	0.006*	0.044*	0.011*	0.334	0.263
Ages	0.511	0.715	0.261	0.98	0.909	0.807
Gender	0.011*	0.027*	0.001*	0.019*	0.616	0.199
Duration of homelessness	0.114	0.332	0.665	0.644	0.488	0.741
Places resided prior to utilizing shelter	0.004*	0.027*	0.878	0.000*	0.121	0.353
Employment status	0.186	0.027*	0.929	0.929	0.271	0.394
Income	0.263	0.040*	0.878	0.312	0.022*	0.494
Any involvement in criminal act	0.003*	0.007*	0.022*	0.040*	0.389	0.028*

*p-value less than 0.05

The correlation between demographic characteristics and each group of psychiatric disorders was demonstrated in Table 3, the table also included diagnosis, with at least one psychiatric disorder and being diagnosed with more than one psychiatric disorder.

Being diagnosed with at least one psychiatric disorders was associated with gender, places resided at, prior to using shelter and an

involvement with criminal activities (*p*-value 0.011, 0.004, and 0.003 respectively), while in the case of being diagnosed with more than one psychiatric disorder, it was correlated with almost every demographic background.

Shelter and gender were associated with more complicated mental health problems. The homeless who resided in the public shelter were also more likely to be diagnosed with more complicated problems including substance-related disorders and psychotic disorders (*p*-value 0.044 and 0.011, respectively), and being male, homeless was more likely to be diagnosed, with these disorders as well (*p*-value 0.001 and 0.019, respectively). Furthermore, the psychotic disorder was also associated with the place resided at, prior to utilizing shelter.

On the other hand, having history of being involved with any crime was more likely to be diagnosed with numbers of diagnosis included substance-related disorders (*p*-value 0.022), psychotic disorders (*p*-value 0.04), and anxiety disorders (*p*-value 0.028).

The ages and the duration of homeless episodes of the participants were not correlated to any psychiatric diagnosis, as well as having any manic or hypomanic episode. This was not correlated to the homeless persons background.

In the case of the thematic analysis from semi-structural interviews on the limitation of utilizing healthcare services, several themes have been reported among half of the participants (one participant may report more than one complications). The limitation includes: 1) the issues of the expense of medical fees and healthcare coverage, which were among the most common themes (32.76%); 2), the problem of transportation

and traveling fees to services (21.56%); 3) quality of the services and a feeling of receiving substandard care (12.1%), this included quality of the healthcare service, such as excessive waiting time in an office, hour, the high price of effective drugs which were unaffordable, as well as the complicated procedures of the service itself; and 4) disrespectfulness and discrimination among the healthcare providers (5.17%), especially, among those who are stateless persons.

Discussion

The result suggested that the prevalence of the psychiatric disorders of the homeless in the shelters in Bangkok is greater than the general population (Sooksompong, 2016). This is one explanation for the high prevalence of psychiatric disorders in the homeless, compared to the general population. The results indicated that over half of the participants were unemployed and one-fourth depended on State' pensions alone. They have experienced more financial disadvantage than the general population. This was congruent with the cohort study that has shown the marked disparity of the rate of first hospitalization, due to the psychotic disorders, and the substance use disorders, between the lowest income decile, and the highest income decile (Suokas et al, 2020). Moreover, Suokas et al. (2020) have also suggested the disparity of the incidence rate of the mood and anxiety disorders as well, but with less disparity.

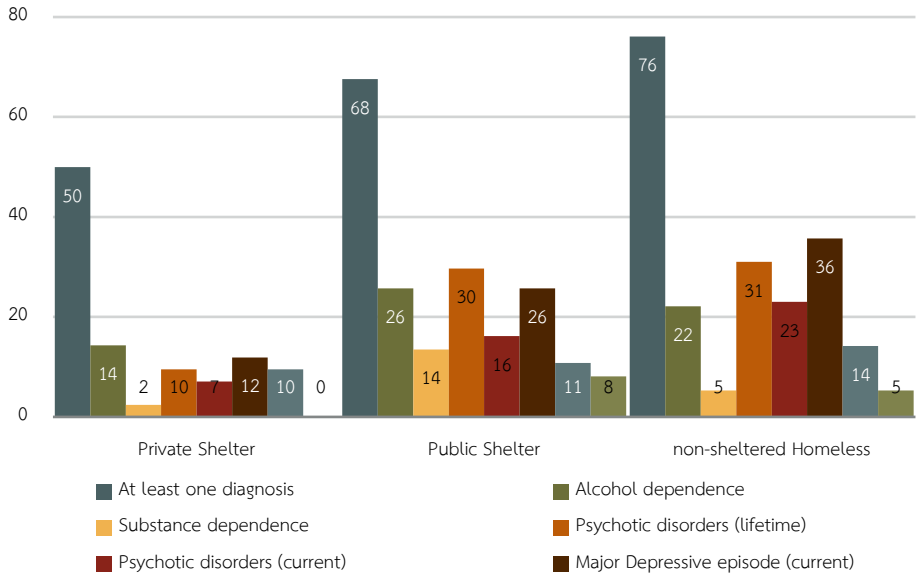

Figure 1. The comparison of common psychiatric disorders between each shelter and non-sheltered homeless from Awirutworakul et al. (2018)

The common psychiatric disorders in this study are similar to the prior study in Bangkok, including the substance-related disorders, the psychotic disorders, the depressive disorders, and suicidal risk. Even though the overall prevalence rate was lower compared to the previous study in the unsheltered homeless (Awirutworakul et al., 2018). However, the differences between the private and the public shelter are worth consideration, as shown in the Figure 1. In the public shelter, about a half of the participants had resided in public spaces before using shelter services, they showed up a higher rate of psychiatric problems and comorbidity. Those common psychiatric disorders are proportionately alike to the unsheltered homeless (Awirutworakul et al., 2018). These

relatively show that the homeless who had been unsheltered, critically suffered from psychopathology, similar to the outcome of what Nyamathi et al. (2000) have demonstrated decades earlier. Among the homeless in the public shelter, the lifetime prevalence of psychosis is tripled in comparison with that which can be observed in the private shelter which shows a higher psychopathology among those who had resided in public spaces, and the hardship of living in the street that affect social functions. Another major different characteristic between two shelters to be considered is that the private one requires a rent, though lower than a market price. Therefore, the residents are obviously able to earn incomes, showing a higher social function.

The males are more susceptible to psychiatric disorders as studies have shown, predominantly, substance-related and psychotic disorders (Laporte et al., 2018; Nielsen et al., 2011; Teesson et al., 2004; Vázquez, Muñoz & Sanz, 1997). While, several studies demonstrated the dominant of depressive or mood disorders among the females (Beijer & Andréasson, 2010; Laporte et al., 2018; Teesson et al., 2004). This may due to a disproportion of male and female participants with just a few were from the public shelter. However, the depressive disorders is lower among those who can earn income, the result can be explained with the inferiority of socioeconomic status. Being in the lower socioeconomic status increases risk of being depressed (Lorant et al., 2003). In addition, the ability to work and earn income may show self-efficacy which is correlated with depression in a negative way (Poophalee, 2016).

Having a history of an involvement with crime or correctional facility plays a crucial role, on both the episode of homelessness and

mental illness. According to the comparative study of homelessness between the general population and inmates, it indicated that mental illness together, with substances abuse were the strongest predictors of homelessness, among the inmates. Moreover, the inmates were more likely to experience homelessness than the general population (Greenberg & Rosenheck, 2008).

In the case of the limitations in using healthcare services, although half of the participants reported at least one limitation, the other half of the sheltered homeless was satisfied with the healthcare services they have used. The existence of the universal health-care coverage scheme in Thailand may plays a vital role for this reason. As a consequence of having entitlements to health insurance and is associated a lower report of healthcare barriers. (Bushel et al., 2001). Nevertheless, another reason of having no complaint of using healthcare services, may be due to the fact that they are unaware of their health condition and disregard the health issues intentionally from prioritizing other significant things in life (Daiski, 2005; Martins, 2008; Rae & Rees, 2015).

However, numbers of the homeless, still encounter several problems of using the healthcare system coverage. Among those who acknowledge the limitations, the major problem was an inability to pay the medical fee, and also they were unable to use the healthcare coverage, followed by the transportation and traveling fees to services. These were common causes that hinder the homeless person accessing healthcare services, that have been shown in numbers of studies (Daiski, 2005; Martins, 2008; Rae & Rees, 2015; White & Newman, 2015). The homeless in Bangkok are the poor who are living with financial deprivation,

earning unstable income, or even being unemployed. Not only that some of them are also migrants who moved from other parts of Thailand, but also, the homeless who are able to earn income are likely to work as unskilled labors in informal economic sectors, which are precarious jobs, and are not entitled to the social security scheme (Chaiwat et al., 2018). As a consequence, the homeless have to depend on the universal health-care coverage scheme, nevertheless, they are unable to use the healthcare coverage.

Firstly, the universal coverage has conditions or rules. In some cases the healthcare coverage only partly covers them and the homeless have to pay the bill. For instance, using healthcare services during an extended clinic of the State hospital. Secondly, the entitlement of universal healthcare only covers the medical bill of a specific hospital at a native habitat (the hospital or clinic that people have registered). Whereas, the majority of homeless people are working in informal economic sectors, such as, security guards, laborers, or house keepers. Their shifts vary, and the place where they work is also highly mobile and controlled by their contractors. It is difficult for the homeless to use healthcare services in office hours, or at a fixed State hospital where he or she is already registered. Therefore, the limitation of the universal healthcare coverage scheme leads to the homeless tending to ignore their health conditions, especially, when earning income is their first priority.

On the other hand, the complications of the procedure in using healthcare service, as well as its quality are also the barriers that result in the difficulties in accessing the health care service. For instance, under the universal health coverage rules, doctor can only prescribe medications

from the national drug list. If doctor wants to prescribe other drugs that are not listed in the national drug list, the homeless will be charged for this. Another example is that homeless people may have to wait for a long time during office hours, at an overcrowded hospital and is a problem for them, as it is their time of earning an income. In the case of the healthcare personnel, some have negative attitudes to the homeless that makes them feel uncomfortable, feeling discriminated against, or suffering from a discourteous service from medical' personnel. These lead them to feel mistrustful toward the healthcare providers, and again make them avoid seeking medical help, which impedes their response to seeking medical help (Daiski, 2005; Grech & Raeburn, 2019; Martins, 2008; Rae & Rees, 2015; Viwatpanich, 2015; White & Newman, 2015).

These findings suggest that the psychiatric and medical care are essential and in urgent need, for the homeless. To promote healthcare services for the homeless, hospital-based care alone, is not sufficient enough, to provide an availability of medical or psychiatric care for the homeless (Grech & Raeburn, 2019; Martins, 2008; Rae & Rees, 2015; Viwatpanich, 2015; White & Newman, 2015). Moreover, the universal health-care coverage, covers only the hospital where the patients have registered and was therefore not flexible enough. It was not sufficiently practical to serve the homeless, due to their frequent mobility around the city. Outreach healthcare programs, or mobile medical units for underserved population may be an alternative to provide basic healthcare, as well as mental healthcare services (Daiski, 2005). In addition, effective case management, such as assertive community treatment, or critical time intervention have proved to be cost-effective

in helping mentally ill homeless people and should be implemented (Vet et al., 2013). By providing a holistic approach into the healthcare practices for this population, may play a vital role in improving their living condition, and supporting them to reintegrate into the society.

The strength of this study is the recruitment of over a hundred participants who were voluntarily joined the study, representing homeless people, who reside in shelters in Bangkok. However, this cannot be represented as the whole population, in understanding the prevalence of psychiatric disorders and the limitation of accessing the healthcare services among the homeless population, of Bangkok. A further limitation, is that this study does not include homeless people who are speech or hearing impaired. Another limitation is that the study was done in a short period, so it may not represent the whole picture. The comparisons between mental illness and psychiatric or healthcare accessibility in the longitudinal term, prior to, and after residing in the shelters, requires further investigation.

Conclusions & Recommendation

To conclude, the prevalence of psychiatric disorders among sheltered homeless was slightly lower than that found among the unsheltered homeless, from other studies. The prevalence of such disorders among the homeless who resided in public shelter was more alike to the unsheltered homeless. However, the number of psychiatric disorders found in these groups was greater than in the general population. The common psychiatric concerns in the sheltered homeless include substance-related disorders, psychotic and related disorders,

depressive disorders, and suicidal risk. The needs of healthcare among the underserved population have to be noticed especially in psychiatric practices. An improvement of healthcare availability and accessibility is required, and the barriers towards using healthcare must be removed.

Sheltered services can play a crucial role in this issue and a screening process is the key to achieve the healthcare needs. Screening instruments such as structural interviews for screening common mental disorders should be implemented in the shelters, to offer primary assessment, for those who need psychiatric intervention. In the case of improvements in screening, shelters can collaborate with other organizations that specialize in the mental health field, to improve shelter staff competency, in screening.

To enhance availability and accessibility of healthcare, an outreach healthcare program, or mobile medical units may be a possible solution for providing such primary healthcare services, for the underserved population, who experience healthcare barriers and housing problems.

In addition, as mentioned earlier, the homeless also experience a wide range of socio-economic disadvantages, especially, in terms of unemployment and financial deprivation. Prescribing medication alone for mental health patients, may not be effective, in coping with their mental health conditions. In terms of social and psychological aspects, the homeless, who are mentally ill, may benefit from several case managements, that have proven cost-effectiveness. Providing these holistic approaches into the healthcare practices and the shelter services in order to tackle the complicated problems the homeless experience,

may play a vital role in improving homeless people's living conditions, thus helping them reintegrate, into society.

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