Schizophrenia in the Context of Mental Health Services in Palestine

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Abstract

Background: Mental health conditions are a significant cause of disability in the Arab World. Palestinians are especially at a higher risk for mental health problems due to their chronic exposure to political violence, prolonged displacement, and others as a limited professional, educational, financial opportunities, and mental health services. Schizophrenia is an overwhelming mental illness that affects nearly one percent of the various populations throughout the world. Studies have shown that people with schizophrenia die prematurely and have lower life expectancy compared to the general population. Moreover, antipsychotic medications and the client's lifestyle play an important role in increased morbidity and mortality in these clients. The present study undertakes a literature review of research on schizophrenia in the context of mental health services in Palestine.

Methods: Studies were identified through PubMed, Science Direct, Google Scholar, CINAHL, Semantic Scholar, Elsevier, and the reading of complementary references from August-November 2019. Results: Twenty-four studies were included in this review. Eleven articles related to schizophrenia and thirteen articles related to mental health services in Westbank and Gaza. Results revealed that the life of schizophrenic patients in Palestine is complicated. Barriers as lacking awareness about mental illness, stigma, inconsistent availability of medications, absence of multidisciplinary teamwork, insufficient specialists, fragmented mental health system, occupation, and other obstacles stand in the face of improving the quality of life among schizophrenic patients.

Conclusions Recommendations include ending the occupation as the leading cause of mental illness for Palestinians and implementing efficient and effective mental health nursing care through the multidisciplinary work and raising awareness regarding mental illness to fight the stigma, should be applied.

Background

According to the Palestinian health information center PHIC 2018, the overall population of Palestine is 5 million, divided between the three areas of the West Bank, Gaza, and East Jerusalem within the occupied Palestinian territory. The history of Palestine is known by conflict, and the challenging political context has exerted effects on the Palestinian physical, mental wellbeing, and lifestyle. It all started in 1948 when the Palestinians considered the War between Arabic countries and Israel as the beginning of the 'Catastrophe,' which is known in the Arabic language as 'Nakba.' During which thousands of Palestinians were forced to leave their homes and became refugees in Gaza, West Bank, and the surrounding countries. Since 1967, the Israeli occupation has negatively impacted the quality of life among Palestinians through imposing poverty, unemployment, ongoing violence and restriction of resources (such as water, building materials, electricity, in addition to the intermittent restrictions of movement) [1].

The health care system in Palestine is still in its evolutional stage and facing specific challenges linked with occupation and political conflict [2, 3]. The health care system is complex and fragmented, and the essential public health and primary care are proposed by four main facilities: The Palestinian Authority (Governmental), the United Nations, NGOs, and the private health care services [3, 4]. According to the World Health Organization (WHO) and the Ministry of Health (MOH), the community mental health was not one of the priorities on the list of the budget of the MOH [5]. The budget for mental health services consisted of only 2% of the total budget of the MOH. The WHO cooperation with the MOH has been trying to develop the health care system in Palestine, and they have implemented a plan to develop the mental health system in Palestine, including West Bank [6]. As a result, the WHO built new community mental health centers in each city and has also helped in training numbers of mental health professional teams, although the total number of mental health nurses continue to be very few [7]. As this is vital, nurses remain the key to the developing of health systems around the world where they stay globally, the largest of the professional groups involved in care delivery [6].

Nowadays, mental health services in the West Bank and East Jerusalem are community-based care. However, there are only 13 community mental health clinics or centers in West Bank, in addition to one psychiatric hospital in Bethlehem. Mental health services in Palestine continue to be underreported, under-resourced, under-researched, under-supported, and the mental health services are still underfunded, and these services are not able to meet the burden of need [7, 8]. Besides, severe lackinghuman infrastructure resources, for instance, the total number of the physiatrists is only 20 in the West Bank [3]. Each community mental center contains mostly a psychiatrist, psychologist, or social worker in addition to one not well-trained or specialist mental health nurse [9]. One of the reasons contributed to the lack of community mental health nurses is a stigma related to nurses who work in community mental health care centers [7]. Besides, the mental health system has been affected negatively by the political conflict [7]. Restrictions on freedom and movement considerably limit patients from receiving care outside of their area of residence, and the cost of treatment, and inconsistent availability of medications on the WHO essential medicines list present further access issues [3]. This is thought to increase the challenges facing health workers in their daily routines.

With all the challenges that faced the Palestinian people, the fact of ‘Sumud’ and health-related Resilience, which is in the deeper roots of the Palestinian context, played an essential role in remaining steadfast in the face of their daily challenges [10]. However, this does not eliminate the fact that Palestinians can expose to mental health illnesses like any other population. In fact, with their history that is full of conflicts, struggle, and poverty, it’s most likely that the number of mental health problems is willing to increase. According to Afana et al. [11], the historical events have made approximately one-third of Palestinians in need of mental health interventions, which makes mental ill-health one of the largest but least acknowledged of all health problems.

Schizophrenia is a mental disorder that affects approximately one percent of the various populations throughout the world. Schizophrenia is characterized by delusions, hallucinations, disorganized speech and behavior, and other symptoms that cause social or occupational dysfunction. For a diagnosis,

symptoms must have been present for at least six months and include at least one month of active symptoms (American Psychiatric Association, 2018). The DSM-5 raises the symptom threshold, requiring that an individual exhibit at least two of the specified symptoms. Clients with schizophrenia are reported to have a shorter life span compared to the general population. A shortened life span could be to the increased frequency of some physical illnesses, particularly diabetes and coronary heart disease, in schizophrenic clients [12, 13]. Quality of life is a holistic view of health from a bio-psycho-social viewpoint, which emerged during the post-World War II period, to enhance the post-war economic wealth and standards of living. Quality of life is strongly associated with diseases. Researchers have observed that national deficiencies are associated with some mental disorders [14]. People with schizophrenia reported making significantly weaker dietary choices, perform less exercise and smoke heavily than the general population [15]. In psychiatric practice, weight gain is a long-recognized and commonly encountered problem [16]. Monitoring the body weight in the early treatment will help to predict those at higher risk for substantial weight gain.Lifestyle therapies and other non-pharmacological interventions were also showed to be effective in controlled clinical trials [17].Therefore, this narrative review sought to highlight Schizophrenia in the context of mental health services in Palestine.

Methods

Literature search

We used the following search strategy: 'schizophrenia Palestine,' schizophrenia *West bank, schizophrenia *Gaza, mental health AND Palestine, Palestine AND mental challenges, Arab Mental health AND needs. These words were also used to search in the Arabic language. The literature search was conducted through the following electronic databases: PubMed, Science Direct, Google Scholar, CINAHL (Cumulative Index to Nursing and Allied Health Literature), Semantic Scholar, and Elsevier from August-November 2019. A total of 3062 articles were found using the search strategy. 361 publications remained after duplicates, irrelevant and excluded articles were removed. Additional papers, which did not appear while searching in the electronic database, were obtained via examination of reference lists of published papers. After reviewing in depth of these publications and obtaining necessary data by contacting the authors. 24 studies (24 articles) met the inclusion criteria. Eleven articles discussed schizophrenia and Thirteen article related to mental health in Palestine, West Bank and/or Gaza including one thesis study. All reviewers independently charted the data and discussed the results, and all discrepancies were resolved by the principal investigator (ZS). The studies were grouped by the topic they studied, and for the critical analysis of empirical articles, the following aspects were considered: study type, the survey instrument used, aim, sample, and the key findings.

Inclusion and exclusion criteria

Studies were eligible for inclusion if they satisfied the following criteria: 1. Discussed schizophrenia in Palestine, West Bank and/or Gaza. 2. Discussed mental health or Mental health services in Palestine,

West Bank and/or Gaza. 3. Discussed Schizophrenia and/or Mental health services in Palestine, West Bank and/or Gaza. All articles that discussed schizophrenia from a genetic view were excluded.

Quality assessment

The quality assessment of each study was assessed according to checklist. The checklist consists of the following items: including clear study aims, adequate sample size, response rate reported, and losses given, adequate description of data, appropriate statistical analysis. representative sample, clear inclusion and exclusion criteria, valid and reliable measure of mental health, response rate reported, and losses given. The three investigatorsindependently assessed article quality, and inconsistencies were resolved by the principal investigator (ZS).

Results

The following sections will be divided into two theme categories an overview of schizophrenia in the Arabic and the surrounding countries and Overview of Schizophrenia in Palestine.

An overview of schizophrenia in the Arabic and the surrounding countries

Mental health conditions are a major cause of disability in the Arab World [18]. In Islam, "no responsibility was attributed to a child, a psychotic adult or a sleeping or stuporous person." The care of people with mental illness under Islam is considered a family responsibility [19-23]. In Arabic culture, such an illness is viewed as a family issue. Whether the person is hospitalized or not or kept in or discharged from the hospital depends not on the individual needs but on the desire of the family. Therefore, in Arab culture, the issues of patient consent, autonomy, and decision making are considered family-centered [23].In the Arab world, families of patients with schizophrenia suffer from stigmatization [24]. Actually, it's a common belief in the Arab society that mental illnesses have a devilish and sinful component [25]. Along with stigma, it acts as a barrier to seeking treatment.

The Saudi Arabian Ministry of Health reported that 22.4% of the outpatient mental health services suffer from mental and behavioral disorders caused either by schizophrenia, schizotypal, or delusional disorder [26]. According to Foldemo et al., "Quality of life is a complex and multidimensional construct. The majority of definitions include several broad concepts such as well-being, happiness/ satisfaction, and achievement of personal goals, social relations, and natural capacity." [27]. Recently, quality of life is considered an indicator of the impact of diseases on patients who suffer from mental disorders [28]. A descriptive qualitative study was conducted at a psychiatric outpatient department in Saudi Arabia in 2010 among 159 people with schizophrenia to investigate how do people with schizophrenia perceive their quality of life. Forty-four of the participants from the total sample reported that the shame of schizophrenia affected their lives negatively. Thirty-nine of the participants from the total sample reported that the shame of having schizophrenia had affected their lives. Participants indicated that they would prefer to keep their illness secret for two main reasons: the family shame of having a family member with schizophrenia and the public shame of having schizophrenia. On the other hand, 110 out of 159

participants reported that the positive role of religion, such as praying and using the Quran, was positively linked with improving their quality of life [26]. An additional descriptive study was carried out on 160 Jordanian outpatients diagnosed with schizophrenia. The results revealed that the participants had a poor quality of life. Age, marital status, education level, stigma against mental illness, and severity of depression were significantly associated with quality of life among Jordanian patients with schizophrenia [29]. Stigma related to mental illness refers to "the view that persons with mental illness are marked, have undesirable characteristics, or deserve reproach because of their mental illness" [30]. Stigmatizing attitudes toward people with mental illness are common. The stigma associated with mental illness brings shame to the family and affect the marriage potential for other siblings, so families keep the illness private and are often reluctant to seek professional help [31]. A comparative study aimed to explore the internalized stigma of mental health illness among 200 patients with schizophrenia and their families during the follow-up visit in two settings. The 1st clinic was the outpatient clinic for psychiatric patients affiliated to Abbasia hospital, and the 2nd clinic was the outpatients' clinic for psychiatric patients affiliated to Abha psychiatric hospital using the stigma Impact Scale. Results revealed that both groups of people with schizophrenia and their family caregivers have a high level of the internalizing stigma of mental illness. Results also showed that 80% of family members at Abha hospital agreed that "My life security has been affected by the illness in my family member" and 66% of the family members were strongly agreed and agreed that "I feel I have been treated with less respect than usual by others" and "I feel a need to keep my family members illness a secret" respectively [30].

Overview of Schizophrenia in Palestine

Meeting the need for mental health care for the Palestinian population is still an ongoing struggle [3]. Palestinians are especially at a higher risk for developing mental health illnesses due to their chronic exposure to political violence, prolonged displacement, and insecurity. Additionally, limited professional, educational, and financial opportunities that are linked to the protracted conflicts and instability in the region [32]. These vulnerabilities were compounded by the limited availability of the quality of mental health providers, inconsistent mental health services, and the stigma associated with seeking mental health care [7]. Focusing on only one aspect of the Palestinian reality and gaining more insight into its mental health challenges, especially among schizophrenia patients. According to the Palestinian Health Information Center (PHIC, 2016), the incidence rates for newly reported cases in the West Bank showed that schizophrenia is the third-highest incidence in mental disorders, with it being the highest -Number one- in the treatment with 30,008 cases.

The life and characteristics of schizophrenic patients seem to be vouge. Studies have investigated the lifestyle and clinical features of schizophrenic patients in Palestine. A cross-sectional study design conducted at the governmental primary psychiatric health care centers in Northern West Bank and used a survey to investigate the different lifestyle parameters, diet, body mass index, smoking, and unemployment among 250 schizophrenic clients in Palestine. Results showed that 43.6% had completed their elementary level of education, 41.6% with a high school level, 14.8% with a two-year diploma, and None of the clients had a bachelor’s degree. One hundred and ninety-seven (78.80%) participants were

without a job, and the number of working participants was only 53 (21.2%). Results also showed that only 82 clients (32.8% of the total number of clients) had an average BMI values most of them are males (60 male and 13 female), the number of schizophrenic clients suffering from overweight and obesity was high (67.2%), and the average of waist circumference for most of the clients was abnormal (97.8±13.4). In addition to the previous, over half of the participants were smokers representing (61.20%) [33].

A similar study to the previously investigated the clinical characteristics of schizophrenia among three different group category (Negev Bedouin, Galilee Palestinians, and Palestinian Authority) results reported regarding the category of Palestinian Authority patients, from the 50 patients in this category, (78%) were males, (66%) were single/divorced, (70%) were unemployed and (70%) have low-medium education level. Somatic delusions were the highest delusions in this category (86%) followed by Persecution delusions (82%), and Jealousy delusions were the lowest among Palestinian Authority patients (4%). Among all of the different categories, Palestinian authority patients had the most moderate disability insurance coverage compared with the other two groups [34].

Moreover, a cross-sectional study design was carried out at four governmental primary psychiatric health centers using patients' medical files to investigated Schizophrenia treatment guidelines in care centers located in Nablus, Tukaram, Jenin, and Qalqilya. Both newly diagnosed patients and patients who were not on antipsychotic therapy were excluded. The characteristics of the 250 participants in the study were 182 (73.8%) male patients, 145(58%) live in village/camp, 213 (85.2%) have completed school education or less, 112 (44.8%) were single/divorced, 153(61.2%) were smokers, 219(87.6%) without a job and 161(64.4%) reported having a duration of illness for more than ten years [35].

According to Sweileh et al., several major well-known algorithms were used for the treatment of schizophrenia [35]. Antipsychotic drug therapy is considered to be one of the treatment regimens for schizophrenia and has been reported to successfully minimize the frequency of acute schizophrenic episodes and hospitalization [36]. Schizophrenia treatment guidelines in Palestine were investigated, and results showed that there was a 406 prescription of antipsychotic drugs for the study sample. The antipsychotics were mainly from First-generation type (FGT) (85.7%), the most common antipsychotic medication was used by the patients were: Chlorpromazine tablet (31.5%), followed by Fluphenazine IM depot injection (30.8%), Haloperidol tablet (18.2%), Clozapine (8.6%), Olanzapine (3.7%), Haloperidol Decanoate (2.7%), Risperidone (2%), Trifluoperazine (1.7%), Thioridazine (0.2%) and Zuclopentchixol (0.5%). This study also indicated that antipsychotic prescribing was not in the conformance with the international guidelines with respect to maintenance dose and combination therapy; categorization of Chlorpromazine dose equivalencies (CPZeq) showed that 88 (35.2%) clients were using sub-therapeutic treatments (< 300 mg CPZeq), 105 (42%) were using the optimum dose (300-600 mg CPZeq), 57 (22.8%) were using supratherapeutic treatments (> 600 mg CPZeq) and 7 (2.8%) were using supra-maximal dose (CPZeq>1000 mg) [35].

Antipsychotic medication adherence and satisfaction were also assessed in schizophrenic patients. For example, a cross-sectional study was conducted in 2010 at Al-Makhfya psychiatric health center in

Nablus. Medication adherence was assessed using the 8-item Morisky Medication Adherence Scale (MMAS-8), treatment satisfaction was assessed using the Treatment Satisfaction Questionnaire for Medication (TSQM 1.4), and psychiatric symptoms were evaluated using the expanded Brief Psychiatric Rating Scale (BPRS-E). Results showed that medication nonadherence was common and was associated with low treatment satisfaction scores and poor psychiatric scores; the majority of patients with schizophrenia were nonadherent, and the younger people had significantly lower adherence scores than the elderly (P=0.028) [25].

Antipsychotic medication has serious side effects, including metabolic syndrome (MS) [37]. Metabolic syndrome is defined as a cluster of conditions that occur together, which increases the risk of developing heart diseases, stroke, and type 2 diabetes. These conditions included elevated blood pressure, high blood sugar, excess body fat around the waist, and abnormal cholesterol or triglyceride levels (Adult Treatment Panel III, 2004). A cross-sectional study conducted from August 2011 until February 2012 at governmental primary healthcare psychiatric centers in Northern West-Bank, investigated the prevalence of metabolic syndrome (MS) among 250 patients with schizophrenia above the age of 16 and were diagnosed according to DSM IV. Using the Adult Treatment Panel III (ATP III) criteria, results showed that 109 (43.6%) patients met the criteria for the syndrome, with 39% in males and 55.9% in female patients. Among males, high levels of triglyceride were the most common metabolic component compared to females who have abdominal obesity as a common metabolic component, and elevated fasting blood sugar was the least common metabolic dysregulation in both genders. This study also showed by using the univariate analysis that MS was significantly higher with older age, female gender, longer duration of illness, abdominal obesity, smoking, higher systolic and diastolic blood pressure , high triglycerides, low HDL-C, and fasting plasma glucose compared to the multiple logistic regression analysis which showed that only systolic blood pressure, high triglycerides, high fasting plasma glucose and low HDL-C were significant predictors of MS in schizophrenic patients. This study also supported the previous studies in patients' characteristics. 213(85.2%) had only school education or less, 122 (44.8%) were single or divorced, 153(61.2%) were smokers, and 219 (87.6%) without a job [13].

Metabolic syndrome is not the only complication that affects this category of patients. Diabetes, anemia, cardiovascular diseases, and more were also studied in these patients. A cross-sectional study was carried out in 4 governmental primary psychiatric healthcare centers in Northern West-Bank from August 2011 until February 2012 and used a survey to examine the prevalence of Diabetes Mellitus among 250 schizophrenic patients. The criteria for the patient was age above 16 years old, diagnosed with schizophrenia as defined by DSM IV, didn't suffer from an acute attack of illness during the past year, and their drug regimen had not been changed in the last six months. Results showed that among the study sample, 189 (75.6%) were considered to have euglycemia, and 61 (24.4%) have dysglycemia (defined as FBG $\geq$ 110 mg/dl). Based on the WHO criteria, 27 patients (10.8%) had Diabetes, and 34 (13.6%) had prediabetes. Results of multiple logistic regressions showed that only advancing age and abnormal waist circumference were significant predicators of dysglycemia among schizophrenia clients with a significant (P= 0.003) and (P=0.013), respectively [12].

Inadequate or inappropriate dietary habits increase the risk of anemia in schizophrenic patients [38]. Many studies have demonstrated that people with schizophrenia make poor nutritional choices [39]. A cross-sectional study was conducted between August 2011 and February 2012, covering four governmental primary psychiatric health care centers located throughout the Northern West Bank, reported the prevalence of anemia among 250 patients. Results showed the number of anemic females was 38 (55.9%) out of 68 female patients, while the number of anemic males was 25 (13.7%) out of 182 male patients (P-value <0.01). About 6.1% of male and 11.8% of female patients had leucopenia, while 7.7% of male and 7.3% of female patients had leukocytosis and 5.5% of males and 4.4% of females had thrombocytopenia, while 1.1% of male patients and 5.9% of female had thrombocytosis. Results suggested that an unhealthy lifestyle and poor dietary choices are the primary cause of anemia among these patients [38]. Besides, a cross-sectional study design was carried at four governmental primary psychiatric health care centers in northern West-Bank estimated Ten years' risk of coronary heart diseases (CHD) among 112 schizophrenic patients. Results showed that one-fifth of the patients had a CHD risk of 10% [40].

Globally, approximately 3% of the total burden of human disease is attributable to schizophrenia [41]. The WHO has estimated that around 40-90% of patients having schizophrenia live with their families [42]. A cross-sectional study conducted at the Gaza governmental community mental health centers aimed to investigate the burden of care experienced by 120 caregivers of schizophrenic patients. Results showed that the sociodemographic characteristics of schizophrenic patients were the following: The majority of male patients were 62.5%. About half of the sample were married 53.3%, 28.3% were single, 16.7% divorced, and 1.7% widowed. The educational level showed that 10% were illiterate, 40.9% completed their primary education, 29.2% completed secondary school, 5.8% had a diploma,13.3% had a bachelor's degree, and 0.8% had a master's degree or higher. The rate of unemployment was 87.5%. Regarding the medical income, 81.7% had less than 1000 NIS, 13.3% had 1000 to 2500 NIS, while only 5% had a monthly salary of 2500 NIS or more. The burden on caregivers of schizophrenic patients was measured using the Burden assessment scale. Results revealed that caregivers suffered from a high level of total burden 74.5%, and the distribution was as the following: physical 81%, financial 79.3%, psychological 72.4%, and social burden 68.3%. Results also revealed that there were significant differences in the level of responsibility, and education, occupation, and monthly income of both caregivers and patients [43].

Stigma among psychiatric patients is dangerous as it interferes with understanding, gaining support from friends and family, delays getting help, and self-blame [44]. A descriptive study was conducted at the outpatient clinics of the only psychiatric hospital in the Gaza Strip and used a questionnaire to assess the impact of stigma on the daily life of 106 psychiatric patients. Results revealed that the majority of the participants were males 61.3%, 50% of participants were single, and stigma had a significant effect on the daily life of mental illness patients. The participants highest reports were as the following: "I fell shy because of my psychiatric illness, and this prevents me from expressing my point of view easily" (p=0.004), "I prefer giving a pen name and change my look and clothes when I go to the psychiatrist to avoid an embarrassment" (p=0.007), and then "My request was rejected for several jobs because of my psychiatric illness" (p<0.001) [45].

Discussion

The following discussion will be divided into two theme categories discussing both patients and mental health care providers in the context of mental health services.

Schizophrenic patients within the mental health services context

Psychotic disorders are connected with unhealthy life habits, such as poor diet, smoking, and physical inactivity [46]. Schizophrenia is a disabling psychiatric disorder due to the disease itself, medications, and lifestyle-related factors [47]. Therefore, people with schizophrenia are a suitable target group for health promotion and interventions. From the previously presented studies in Palestine, it was clear that patients with schizophrenia suffer from a seriously unhealthy lifestyle and health challenges during their lifetime. Schizophrenic patients usually have inadequate nutritional intake. A study has shown that schizophrenic patients drink more carbonated drinks, but fewer consume milk, fish, nuts, and vegetables [39], and they tend to take only small amounts of exercise. Factors such as illness, sedative medication, and lack of motivation may be relevant [48,49].This may also justify the high rates of anemia among schizophrenic patients in the previous study.

In the previously presented studies, most of their population sample were males. The high ratio of schizophrenia among male patients in Palestine may be due to the economic crises and political unrest especially that Israel has detained approximately 40% of men in the occupied Palestinian territory, often for indeterminate periods for no specific charges and often suffering mistreatment or outright torture while arrested [50]. Persecutory delusions occur when someone believes others are out to harm them [51]. It's a type of paranoid thinking that can be part of several different mental illnesses; this may justify the result of the previously presented study that reported Persecution delusions were the highest among Palestinian authority patients representing (82%). Stigma related to mental health is prevalent, and this may prevent or delay patients from presenting [52]. The internalized stigma that leads the patients to devalue themselves and increase family concerns about social standing or marriage prospects for other siblings, especially if the patient is female, acts as a barrier for families not to seek mental health services. This can also justify why the majority of the population in the previous studies were male patients.

Over half of all population samples from the previous studies were smokers. Among the mentally ill, smoking prevalence is the highest in clients with schizophrenia (80%), whereas it is 20% in the general population [53,54]. Studies have also shown a strong association between schizophrenia and smoking but with no definitive explanation for this prevalence [55].

Although schizophrenic patients had a lower pre-morbid IQ [56], which may be justified by the results of the previous studies that most of their population samples education was confined only on primary education, this does not mean that this category of patients has no development capabilities. Occupational therapy and rehabilitation were found, along with medication, to improve the symptoms of

schizophrenia [57]. However, in Palestine there is near absence of occupational and rehabilitation plans in community mental health services due to lack of training and understaffed mental health nurses [58].

Moreover, it's well established that people with schizophrenia have markedly high rates of unemployment due to difficulties in social and cognitive function, self-care, residual negative symptoms, and social exclusion [59]. Stigma related to mental illness plays an important role as mentioned in the previous studies in increasing the number of unemployment. In one specific study, participants reported, "My request was rejected for several jobs because of my psychiatric illness" ($p<0.001$) [44]. Moreover, the absence of legislation supporting the right of schizophrenic patients to obtain a job in Palestine exaggerates the unemployment rate among schizophrenic clients. The unemployment rate is 20% and 31% in the West Bank and Gaza respectively; the median family size in the West Bank is 5.4 with an average income per adult 9 USD/day [60].

First-generation antipsychotics (FGAs) are associated with a range of adverse effects that can significantly reduce patients' quality of life and contribute to nonadherence [61]. This confirms the results of the previously presented studies that showed medication nonadherence among the patients with a significant (P-value =0.028). Besides, the cost of treatment, medications, and inconsistent availability of medications on the WHO essential medications list present additional access issues [3]. Even at least 80% of essential psychotropic medications are provided free of charge, whenever a shortage in these medications happen, the cost of private purchases of antipsychotic and antidepressant medication is 5% and 7% of the minimum daily wage in Gaza, respectively [62]. Switching between the drugs when inconstant availability exaggerates the adherence and satisfaction even more. Furthermore, focusing only on medication prescription without combining with psychological treatment such as cognitive behavioral therapy, psychoeducation, and family therapy complicate the life of schizophrenic patients.

Metabolic syndrome, diabetes, anemia, CVD, and other medical complications stand in the face of improving the quality of life in these patients. The absent of the multidisciplinary teamwork and collaboration between the health care providers to screen and follow up the patient's test results place the patients' health in danger. Lacking multidisciplinary working is confirmed by the results of the previously presented studies that revealed (35.2%) clients were using sub-therapeutic treatments, (22.8%) were using supratherapeutic therapies, and (2.8%) were using supra-maximal doses while investigating schizophrenia treatment guidelines. Furthermore, the results shown in metabolic syndrome, anemia, and CVD confirm that there is no screening or follow up plans for these patients. The style of care should move toward multidisciplinary working based on a "non-hierarchical" mental health system, and families should be integrated into the heart of care [7].

Furthermore, patients face numerous barriers to care. One significant barrier is awareness [3,7]. So far, many Palestinians are not aware of mental health issues, and how they present, behaviors associated with depressions, and other common illnesses are often not understood to be psychiatric problems. For instance, in one survey of mothers in Gaza, only 19.6% perceived suicidal behavior as a manifestation of

mental health problems [63]. Patients may be labeled pejoratively, viewed as lazy or crazy, but there is not a widespread understanding that they suffer from a medical condition.

Mental health care providers in the mental health services context

A critical barrier to care is the shortage of health care providers specialized in psychiatric, mental health, and psychology. Published data counts only 20 Palestinian psychiatrists in West Bank, and Gaza combined [3,64]. There are only a few doctoral levels of psychologists and the training in the programs offering bachelor's and master's degree in psychology and social work lack sustainable clinical exposure [3]. The total number of nurses who work in community mental health workplaces in the West Bank is only 17 [65]. These nurses who work in the clinics/ centers have been unable to provide mental health care properly, and some of them work as receptionists or clerks due to the severe shortage of employees or lack of training [7]. Also, a qualitative study reported that none of the nurses who work in mental health services had a master's degree in nursing mental health [58].

The absence of multidisciplinary teamwork in providing care is a further challenge. Physicians have often refused to involve nurses in assessment, evaluation, and treatment strategy effectively [58]. Besides, stigma related to nurses who work in mental health services is also present. According to Manasra [66], mental health nursing is described as not being a desired job due to the associated stigma. For instance, a nurse reported, "a nurse in the primary health department, ridiculed and laughed at me, said that I am crazy to work here in the clinic. For your information, when this job was offered to several nurses, no one accepted it but me" [58]. Additional barriers to nurses who work in mental health services are the inconsistency of care services delivery, including health care supplies, medications, and salaries. For example, a nurse was unable to give the intramuscular injection due to the unavailability of syringes and needles in the center for two months [58]. Moreover, the inconsistent availability of medications in the Ministry of health, which their service depends on Israel's occupation in allowing the delivery of the medical supplies' places additional challenges on mental health nurses in dealing with nonadherence, relapses, and negative symptoms [58].

Besides, occupation played an essential role in causing mental illness. The historical events have made around one-third of the Palestinians in need of mental health interventions [11]. Occupation has also played an essential role in confiscating financial support, international aid, and movement restrictions. Additionally, imposing poverty, unemployment, violence, trauma, and limitation of resources such as water, building materials, and electricity [1,7,67].

Conclusion

Inconclusion, the life of schizophrenic patients in the Arabic world and particularly in Palestine, is complicated. Barriers as the presence of occupation, lacking awareness about mental illness, stigma, inconsistent availability of medications, absence of multidisciplinary teamwork, insufficient specialists, fragmented mental health system, and others stand in the face of improving the quality of life in schizophrenia patients.The priority of the Palestinian health care system should be toward improving the

quality and increasing the number of qualified mental health providers, especially mental health nursing, and stop the occupation as the primary and only prevention.

Recommendations as increasing awareness about mental health and anti-stigma campaigns should be considered. Moreover, efficient and effective care through multidisciplinary teamwork should be implemented. Furthermore, increasing, empowering, and training mental health nurses on psychotherapies to enhance their quality of lives, and allowing mental health nurses to prescribe specific monthly medications independently as in the UK to reduce the burden on the limited number of psychiatrists.

Limitations

The literature review has discussed schizophrenia in the context of mental health services in Palestine. Palestine is a state that is seeking independence with a scare of resources; therefore, the research is underdeveloped. As a result, there is a lack of detailed data regarding schizophrenia in Palestine. Due to lacking the complete data, all literature that was found, including a thesis study that estimated Ten years' risk of coronary heart diseases in schizophrenic patients, was included.

Declarations

Abbreviations

"Not applicable" in this section.

Ethics approval and consent to participate

"Not applicable" in this study.

Consent for publication

"Not applicable" in this study.

Availability of data and material

This is an evidence synthesis study, all data is available from the primary research studies, or can be circulated from the corresponding author.

Competing interests

The authors declare that they have no competing interests in this section.

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Authors' contributions

MM conceived the idea for the study from which this article is drawn. ZS designed the study and data analysis plan.The three authors collected the data, analyzed and interpreted the findings and drafted this manuscript. ZS contributed to the design of the study and data analysis plan. MM supervised the study, the analysis, interpretation of findings, and made substantive intellectual contributions to the manuscript. All authors read and approved the final manuscript.

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