



Social determinants of mental health of women living in slum: a systematic review

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Objective

With the rise of urbanization globally, the problem of living in slums has become a problem for the civil society. As a vulnerable segment, women make up half of the population in these regions; therefore, women's mental health has always been a concern. The purpose of this study was to review the social determinants of mental health in women living in slum areas.

Methods

We systematically reviewed articles published between 2009 and 2019 on the social determinants of women's mental health in SID, Magiran, Google scholar, PubMed, Scopus, Science Direct, Embase, MEDLINE, PsychINFO, and PsychARTICLES databases using MeSH keywords according to PRISMA guidelines. The quality of the studies was assessed depending on the type of study using Ottawa Newcastle" scale and Joanna Briggs Institute quality assessment tools. Finally, 23 studies were analyzed.

Results

Different social determinants influenced the mental health of women living in slum areas. Among the structural determinants, the socioeconomic level had the highest frequency, and gender was in the second rank with the highest correlation with poorer women's mental health status. Among the intermediate determinants, living conditions, food insecurity, social capital, and social support were most frequently associated with mental health status.

Conclusion

Women living in slum areas are prone to developing mental disorders and poorer mental health; therefore, supporting these women and creating job opportunities to raise their incomes and, subsequently, improve their social, economic, and living conditions should be taken into consideration. In addition, this requires careful planning and comprehensive social support.

Keywords: Mental health; Social determinants of health; Slums; Suburbanization; Women

Introduction

In recent years, owing to the expansion of urbanization, residents have been given the opportunity to access extensive health care facilities [1].

However, this expansion has led to more number of residents living in slums, especially around large cities [2]. With the unexpected growth of urbanization, living in slums has become a pervasive problem in many parts of the world, causing many social consequences [3].

Residents living in slums are prone to diseases, injuries,

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premature death more than those not residing in slums; moreover, the disease, coupled with poverty and its harmful effects, increases over time [4,5].

In the World Health Organization (WHO) Statute, drafted in 1946, health is defined as “the state of complete physical, mental, and social well-being and not merely the absence of disease” [6]. Health is, individually and socially, one of the most important aspects of human life. Health is a prerequisite for social roles; therefore, all human beings can be fully active in society if they are healthy. Health has many dimensions, one of which is mental health [7].

Mental health is an aspect of the general concept of health and is defined as the power to live calmly with oneself and others; moreover, it also involves to be calm, aware of oneself and one’s feelings, make decisions in times of crisis, and successfully cope with stress [8]. Mental health is an art that helps people to psychologically and emotionally adapt to their environment and to choose the most desirable solutions to solve their problems, as people cannot be effective in carrying out their social responsibilities if they are mentally burdened. Today, mental health is very much in focus [9,10].

Social determinants of health are the conditions in which people are born, grow, live, and work. Justice in health means the absence of preventable health differences among populations or groups of society that can be caused by differences in racial, economic, demographic, or geographical status. Health, which a community can achieve using methods that lead to interdisciplinary participation and collaboration, is a multifaceted subject; therefore, a look at the social determinants of health shows that the provision, maintenance, and promotion of a community’s health is not realized solely by the Ministry of Health [11].

Systematic reviews summarize the reported results with clear goals and provide the best evidence for judgment [12,13]. Women constitute half of the population of any society, and they play diverse social and economic roles.

Women’s health is at the core of ensuring the functioning of families and communities and is of particular importance in providing and maintaining family and community health. Given the special conditions of living in suburban areas and the importance of mental health of women as a vulnerable group, we aimed to systematically review factors affecting the mental health of women living in slums.

Criteria for considering studies for this review

1. Search strategy

This study was reported based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines [14]. Web of Science, MEDLINE, SID, Magiran, Iran doc, Google Scholar, PubMed, Scopus, Science Direct, Embase, MEDLINE, PsychINFO, PsychARTICLES databases were searched for articles published between 2009 and 2019. Keywords were selected using the MeSH keyboard (Table 1).

According to the WHO model, social determinants of health are socioeconomic structural factors such as income, education, employment, social class, gender, race, and ethnicity; intermediate factors such as living conditions; behavioral and biological factors such as physical activity, alcohol consumption, and tobacco use; and health system-related factors [15].

2. Inclusion and exclusion criteria

Studies published in Persian and English between 2009 and 2019 that examined factors affecting the mental health of women living in suburban and slum areas with different ages and income levels were included.

Articles with no access to full-text articles, articles written in languages other than English and Persian, study protocols, case studies, brief reports, and studies conducted on women

Table 1. Search strategy

No.	Search term
#1	“mental health”[tiab] OR “mental hygiene”[tiab] OR “mental diseases”[tiab] OR “mental problem”[tiab] OR “mental illness”[tiab]
#2	‘suburban area’ [tiab], OR ‘suburbia’ [tiab], OR ‘suburbanization’ [tiab], OR ‘slum’ [tiab], OR ‘informal settlement’ [tiab], OR ‘marginalization’ [taib]
#3	‘woman’ [tiab], OR “women” [tiab], OR “female” [tiab]
#1 AND #2 AND #3	

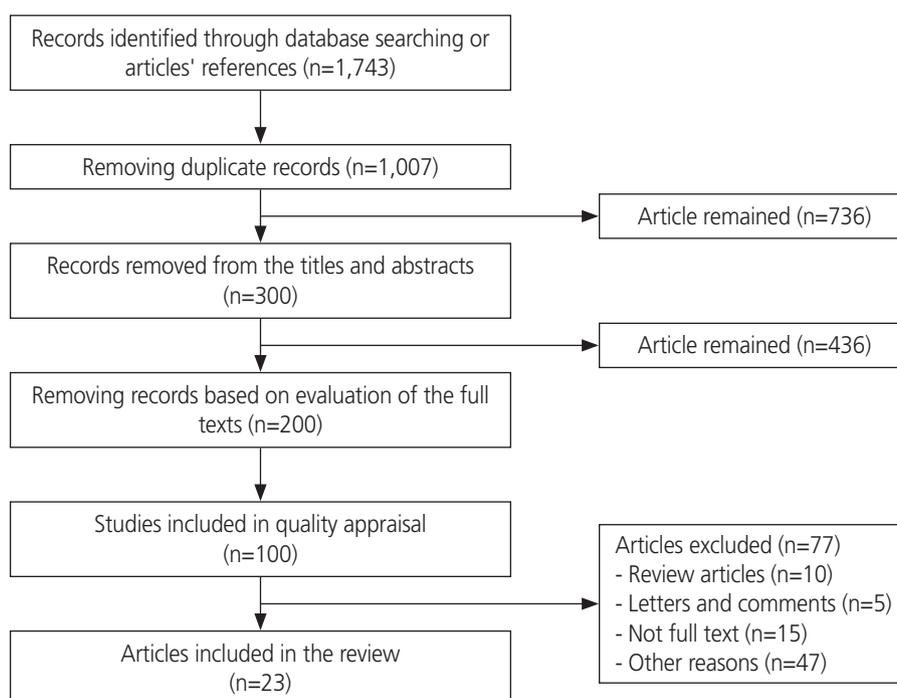


Fig. 1. Search flow diagram.

Table 2. Quality assessment of the studies by "Ottawa Newcastle" scale

Study	Year	Study type	Selection	Comparability	Outcome
Chauhan and Dhar [16]	2019	Cross sectional	****	**	**
Ashe and Routray [17]	2019	Cross sectional	****	**	***
Mathias et al. [18]	2018	Cross sectional	***	*	**
Mutiso et al. [19]	2008	Cross sectional	****	**	**
Rani et al. [20]	2018	Cross sectional	****	**	***
Khan and Flora [21]	2017	Cross sectional	****	**	**
Khayat et al. [22]	2017	Cross sectional	****	**	***
Panigrahi et al. [23]	2017	Cross sectional	***	**	***
Jacobs and Harville [24]	2015	Cohort study	****	*	***
Khopkar et al. [25]	2015	Cross sectional	****	**	**
Kiran et al. [26]	2015	Cross sectional	***	**	***
Gupta [27]	2015	Cross sectional	***	*	***
Gilan et al. [28]	2014	Cross sectional	***	*	***
Hiremath and Debaje [29]	2014	Cross sectional	***	**	**
Subbaraman et al. [30]	2014	Cross sectional	****	**	***
Haghighatian and Jafari [31]	2013	Cross sectional	***	*	***
Nahar et al. [32]	2013	Cross sectional	****	**	**
Dasgupta et al. [33]	2013	Cross sectional	****	*	***
Gruebner et al. [34]	2012	Cohort study	****	**	***
Gruebner et al. [35]	2011	Cohort study	****	**	**
Rabbani et al. [36]	2011	Cross sectional	***	**	**

Table 3. Qualitative studies assessed by Joanna Briggs Institute (JBI) checklist

Checklist	Study		
	Elsey et al. [37] (2016)	Travasso et al. [38] (2014)	Subbaraman et al. [30] (2014)
Is the review question clearly and explicitly stated?	Yes	Yes	Yes
Were the inclusion criteria appropriate for the review question?	Yes	Yes	Yes
Was the search strategy appropriate?	Yes	Yes	Yes
Were the sources and resources used to search for studies adequate?	Yes	Yes	Yes
Were the criteria for appraising studies appropriate?	Yes	Yes	Yes
Was critical appraisal conducted by two or more reviewers independently?	Yes	Yes	Yes
Were there methods to minimize errors in data extraction?	Unclear	Unclear	Unclear
Were the methods used to combine studies appropriate?	Yes	Yes	Yes
Was the likelihood of publication bias assessed?	Unclear	Unclear	Unclear
Were recommendations for policy and/or practice supported by the reported data?	Unclear	Unclear	Unclear
Were the specific directives for new research appropriate?	No	No	No

with known psychological problems requiring treatment were excluded.

3. Study selection

An initial search yielded 1,743 results. The eligibility of these papers was independently evaluated by 2 authors, and any disagreements were resolved by consensus. In the first stage, 1,007 papers were excluded because they were irrelevant or duplicated. After reviewing the titles and abstracts of the remaining papers, 300 more papers were excluded. During evaluation of full texts, 200 out of the remaining 436 articles were excluded owing to being ineligible. Finally, a total of 23 eligible articles were reviewed (Fig. 1).

4. Quality assessment

The Newcastle–Ottawa scale (NOS) was used to assess the quality of the studies. This scale is used to measure the quality of cohort and case–control studies. The validity and reliability of this tool have been proven in various studies (Table 2). The checklist items focused on reporting or evaluating different sections of observational studies. Qualitative studies were assessed using the Joanna Briggs Institute (JBI) checklist (Table 3) [14,39].

5. Data extraction

Two authors independently performed the study selection and validity assessment and resolved any disagreements by consulting a third researcher. Data on first author name, pub-

lication year, study design, sample size, geographic region, age, social determinants of mental health, tools, results, and quality assessment were extracted and entered for analysis.

Results

After evaluating and determining the final quality of articles, 23 relevant articles were selected (Table 1). As observed, most of the articles had a quantitative design (n=20). Other studies had a qualitative (n=2) and mixed method (n=1) design. A total of 6,755 women were examined in different age groups such as adolescence, middle age, reproductive age, and older age (total age range, 10–81 years). Studies were conducted on women from the suburbs and slums of numerous countries. The largest number of studies were conducted in India (n=12), followed by Bangladesh (n=4), Iran (n=4), Kenya (n=1), Mexico (n=1), and Nepal (n=1).

1. Structural factors

As shown in Table 4, different social determinants can contribute in improving or weakening women's mental health. The reviewed studies examined different aspects. Structural factors such as gender, level of education, age, social and economic status, household income, marital status, number of households, place of birth, occupation, religion, and place of residence were among the factors covered [16-19,21,23-28,30-32,34,36-38]. The strongest factors that could af-

Table 4. Results from a systematic review of studies

Author (yr)	Year	Study design	Sam-ple size	Region	Age (yr)	Social determinants of mental health			Tools	Results
						Structural factors	Intermediate factors	Health system related factors		
Chauhan and Dhar [16]	2019	Cross sectional	317	India	12–19	- Gender (female) - Education (low grade) - Caste - Household economic status (low income level) - Media exposure - Marital status(married) - Religion	-	-	- GHQ-12	Significant relationship with poor mental health
Ashe and Routray [17]	2019	Cross sectional	105	India	≥60	- Gender (female) - Lower socio-economic status	- Diabetes mellitus - Hypertension - Family member death - Close relative death - Conflict in family - Chronic illness of family members	-	- GDS30	Significant relationship with poor mental health
Mathias et al. [18]	2018	Quasi-experiment	106	India	10–25	- Promoting self-belief - Promoting resilience skills	- Emotional competence - Promotes peer relationships - Strengthens social networks	-	- Nae Disha curriculum - PHQ-9 - GAD-7	Significant relationship between Nae Disha curriculum domains and better mental health
Mutiso et al. [19]	2018	Cross sectional	428	Kenya	≥18	- Gender - Living in urban slum	-	-	- OMICC questionnaire - MINI-International Neuropsychiatric Interview Plus Version 5	Mental illness was not associate with gender but there was a relationship between living in urban slum and mental illness
Rani et al. [20]	2018	Cross sectional	418	India	13–19	-	- Household food insecurity	-	- HFAS - Mental health inventory tools	Food insecurity is independently associated with mental health problems

Table 4. Continued

Author (yr)	Year	Study design	Sam-ple size	Region	Age (yr)	Social determinants of mental health			Tools	Results
						Structural factors	Intermediate factors	Health system related factors		
Khan and Flora [21]	2017	Cross sectional	264	Bangladesh	15-44	- Higher maternal age - Lower educational qualification - Low socioeconomic status	- Household food insecurity - Maternal under nutrition - Child wasting - Child underweight	-	- SRQ-20	Maternal common mental disorders was relatively higher
Khayat et al. [22]	2017	Cross sectional	400	Iran	15-49	-	- Physical violence - Sexual violence	-	- GHQ-28	Status of mental health of suburban women is inappropriate and is under effects of physical and sexual violence
Panigrahi et al. [23]	2016	Cross sectional	362	India	15-45	- Attending religious services less than four times per week - Not being satisfied with managing household financial affairs	- Not having time to attend social obligations month - Addiction of a family member to alcohol or drugs - Misunderstandings or quarrels in the family	-	- Self-reported WHO questionnaire	Married women mental disorder was positively associated with these factors
Eisey et al. [37]	2016	Qualitative	21	Nepal	30-70	- Low household income	- Poor ventilation - Cooking on open fires - Over-crowding - Lack of adequate child supervision	-	- Semi-structured interviews - Observation - Participatory workshops	This also concurs with these conditions and common mental health problems
Jacobs and Harville [24]	2015	Cohort	794	Mexico	18-45	- Older age	- Natural Disaster Exposure	-	- EPDS - PCLS	Younger age at the time of a natural disaster may confer a protective effect on mental health
Khopkar et al. [25]	2015	Cross sectional	248	India	10-19	- Gender (boys) - Lower percentage of both parents with secondary or higher education	- More stunting	-	- GHQ-12	These factors are associated with low-score of GQH-12

Table 4. Continued

Author (yr)	Year	Study design	Sam-ple size	Region	Age (yr)	Social determinants of mental health			Tools	Results
						Structural factors	Intermediate factors	Health system related factors		
Kiran et al. [26]	2015	Cross sectional	440	India	≥18	- Age above 45 years - Married women - Lower socio-economic status - House-wives - Age at first childbirth	- Lack of physical activity - Pallor - Overweight/obesity	-	- Menninger's scale	These factors were significantly associated with potential mental health problem
Gupta [27]	2015	Cross sectional	100	India	13-18	- Age - Gender	- Housing condition (household crowding)	-	- Mental health battery	They are not related to level of mental health is adolescents
Gilan et al. [28]	2014	Cross sectional	555	Iran	15-81	- More children - House wives - Older age	- Low security feeling - Illness situation - Low physical activity	-	- WHOQOL-BREF questionnaire	These factors leads women to poor mental health.
Hiremath and Debaje [29]	2014	Cross sectional	59	India	15-19	-	- Domestic violence	-	- AAMR-ABS - Hamilton depression scale - Memory recall	Domestic violence is a major causal factor for causing depression
Subbaraman et al. [30]	2014	Mixed methods	270	India	≥18	- Gender (female) - Poverty	- One or more physical disabilities - Slum environment	-	- GHQ-12 - WHO Disability Assessment Schedule 2.0 - Slum adversity questionnaire	These factors lead to poor mental health
Travasso et al. [38]	2014	Qualitative	48	India	19-40	- Financial problems - Not fulfillment from work	- Illness in the family especially among children - Low social support from family, friends and colleagues	-	- Kessler psychological distress questionnaire	These factors lead mothers to severe mental disorders
Haghighatian and Jafari [31]	2013	Survey	210	Iran	≥16	- Social norms	- Social trust - Social solidarity - Social capital	-	- WHO GHQ-28 from Putnam and Coleman - Social capital questionnaire including components of trust, network membership, solidarity, and informal norms	There was a positive and significant correlation between these factors and women's mental health

Table 4. Continued

Author (yr)	Year	Study design	Sample size	Region	Age (yr)	Social determinants of mental health				Tools	Results
						Structural factors	Intermediate factors	Health system related factors			
Nahar et al. [32]	2013	Cross sectional	104	Bangladesh	>18	- Living in slum	-	-	- SRQ - SCID		This factor was not associated with psychiatric morbidity.
Dasgupta et al. [33]	2012	Cross sectional	220	India	18–40	-	- Support - Spousal violence - Husbands' risky alcohol use - Low local social	-	- Centers for Disease Control's Behavioral Risk Factor Surveillance System (CDC, 2009).		These factors lead to depression.
Gruebner et al. [34]	2012	Cohort	983	Bangladesh	15–99	- Job satisfaction - Better sanitation and income generation ability - Older age - Gender (male) - Worsen personal health knowledge	- Not having disease - Lower flood risk - Higher quality, sufficiency, and durability of the house - Lower population density	-	- GPS - GIS - WHO-5 well-being index		These factors lead to better mental health.
Gruebner et al. [35]	2011	Cohort	104	Bangladesh	≥15	- Low-income generation ability	- Poor social fabric - Poor neighborhood socio-physical characteristic - Risk of flood - Far away from green areas	-	- GPS - WHO-5 questionnaire		These factors are associate with poor mental health.
Rabbani et al. [36]	2011	Survey	199	Iran	15–65	- Education - Marital status - Job status - Birth place	-	-	- Questionnaire		These factors have positive association with mental health.

GHQ, General Health Questionnaire; GDS, Geriatric Depression Scale; PHQ, Patient Health Questionnaire; GAD, Generalized Anxiety Disorder scale; OMICC, Opinions about Mental Illness in the Chinese Community; HFIAS, Household Food Insecurity Access Scale; SRQ, Self-Reporting Questionnaire; WHO, World Health Organization; EPDS, Edinburgh Postnatal Depression Scale; PCLS, Posttraumatic Stress Disorder Checklist Scale; WHOQOL-BREF, World Health Organization Quality of Life Brief Version; AAMR, Adaptive Behavior Scales; SCID, Structured Clinical Interview for DSM Disorders; GPS, Global Positioning System; GIS, Geographic Information System.

fect mental health according to the studies were related to household income and socioeconomic status, which were highlighted in 10 studies [16,17,21,23,26,30,34,35,37,38]. These studies indicated low income, poverty, and low socioeconomic status can lead to poor mental health in women. The second factor affecting women's lower mental health was gender. Seven articles examined the relationship between gender and mental health [16,17,19,25,27,30,34], three of which showed that women were more susceptible to mental disorders [16,17,30], one study reported this issue in men [25], and three studies showed no relationship in this regard [19,27,34]. Six studies also examined the relationship between age and mental health [21,24,26-28,34]. Five studies showed increasing age and age at birth of the first child [21,24,26,28,34], and one study did not show any association [27]. Job status was examined in 5 studies [26,28,34,36,38] that showed that unemployment, being a housewife, and dissatisfaction were related to a low level of mental health. Another factor was living in the suburbs and slums [19,30,32]. Three studies showed that living in the slums is one of the factors that affect women's mental health, which is aggravated by overcrowding in these areas. A low level of education of women themselves or their parents at adolescence can potentially cause poor mental health in these areas [16,21,25,36]. Marital status was also examined in 3 studies, which concluded that married women had poorer mental health than unmarried women [16,26,36]. The number of family members can also have an impact on mental health, with women with more children and a busy family having a poorer mental health than women with a smaller family [28,34].

2. Intermediate factors

Disease status [17,28,30] and disability [30] were studied in four articles. Chronic diseases such as diabetes and hypertension or physical disabilities can also be linked to mental disorders in women.

Social determinants of mediators affecting mental health may also include living conditions [27,34,35], family conditions [17,23,34,37], domestic violence [22,29,33], nutritional status [20,21,25,34,35], and social factors [18,23,31,35,38].

Four studies found that inadequate living conditions, such as poor ventilation, poor cooking conditions, social living conditions, and living away from green spaces could be associated with poor mental health.

Abuse by spouse following alcohol consumption [33], family members' addiction [23], death of family members, family members' illness [17], lack of understanding by family members [23], and family disputes [17] are among the factors influencing women's mental health. Family members' illness comprised the largest proportion and was discussed in 2 articles [17,38].

The likelihood of natural hazards such as flooding was assessed in 3 studies, and a direct relationship was shown between the risk of natural disasters and poor mental health [24,35].

Domestic violence, such as sexual and physical violence, was reported in 3 studies [22,29,33], and its relationship with the incidence of mental disorders in women has been demonstrated.

Nutritional status was assessed in 5 studies [20,21,25,34,35]. The lack of food security in the family was reported in 2 studies, and another study found that a poor nutritional status of mothers effectively lowered the level of women's mental health. The same was true for obesity and overweight.

Social factors [18,23,31,35,38] such as the lack of social trust, social cohesion, social norms, social capital; low social support from the community, family, friends and co-workers; poor social fabric; low security; and negligence with respect to social norms can also be associated with poor mental health in women.

According to the Nae Disha curriculum [18], strengthening and training areas; building emotional competence and peer relationships; and strengthening social networks, self-belief, and resilience tones are effective in promoting the mental health of slum women.

Other factors associated with low levels of women's mental health include caste, media exposure [16], child wasting, child underweight [21], pallor, low physical activity, and obesity [26].

The tools used to screen for mental health and other factors are also listed separately in each study. As observed, the General Health Questionnaire (GHQ) was used in 5 studies with the highest frequency. Its 12-item form was used in 3 studies, and its 28-item form was used in 2 studies. Two studies also used the WHO-5 questionnaire for mental health screening.

Discussion

In the present study, the findings indicate that social health determinants affect slum women's mental health. Among the structural determinants, gender and social class (education, job, and socioeconomic status) correlated the most. According to the results, the higher the socioeconomic status and income level of this segment of society, the worse the mental health status of women. Recent findings are in line with the results of Weinberg et al. [40]. They found, in a 16-year study in the Netherlands, that socioeconomic status and educational attainment inversely and negatively correlated with mental health in adults. Sweeney et al. [41] found that socioeconomic deprivation was associated with an adverse public health status. The use of mental health services in this group of people is different from that of other groups, and they have less access to medical services to manage their mental health problems. In this group, there are more unemployment disorders that increase social stigma, which can lead to undesirable consequences such as social isolation, inappropriate health behaviors, and an exacerbation of mental problems [41].

Influential social factors reflect different positions of people in the social ladder of power and resources. Evidence suggests that most illnesses and health inequalities in the world stem from social factors. The context of these factors shows that in many countries, it is impossible to achieve health goals without achieving significant success in poverty alleviation, food security, education, women's empowerment, and improved living conditions in poor and densely populated areas. The definitive role of social and environmental factors that affect people's health has long been recognized. Epidemiological research has proven that environmental and social factors have been important in improving the health of many populations in industrialized countries at the turn of the century. The WHO Statute, drafted in 1946, addressed the fact that its founders intended to address the social roots of health problems as well as confront the challenges of effective health care and treatments. In this statute, health is defined as "the state of complete physical, mental, and social well-being and not merely the absence of disease" [6].

Education is one of the determinants of social class and socioeconomic status [4]. In the modern world, education is seen as a means of improving the quality of life of individuals and has a strong effect on mental health; moreover, stud-

ies suggest that there is a significant positive relationship between low education and mental disorders such as severe depression [21]. Carter et al. [42] also found that class discrimination directly and significantly correlated with education levels, depressive symptoms, and anxiety, and these results are consistent with findings from a recent study. Studies conducted in Iran also indicated that the education of slum women is low, such that in a cash study by Naghdi and Zare [43], 86.7% of women living in slums in Shiraz were illiterate or had elementary or secondary education. Similar results were also found in studies conducted in other countries. Of women living in slums, 12.8% were mostly illiterate and 80.6% had primary and secondary education [44]. Generally, illiteracy and low literacy in the slums and suburban areas is a significant problem associated with socioeconomic status and mental health.

Gender was another factor that was most frequently reported in the studies related to mental health. According to the findings of the studies, women were more susceptible to mental disorders than men. This finding is consistent with that of Gitay et al. [45]. In their study of 300 students in Pakistan, they found that women experience mental disorders such as anxiety and depression more than men [45]. Among the intermediate determinants, living conditions, food insecurity, social capital, and social support were most frequently associated with mental health. Living conditions and lifestyle are intermediate health determinants that can be directly or indirectly related to people's health [46]. According to current findings, various aspects of adverse living conditions such as inadequate housing, social living conditions, and being away from appropriate living facilities are associated with the mental health of this vulnerable group. Khayat et al. [46] in their study of slum women in Zahedan found that women in these areas were experiencing very poor living conditions and health status, which resulted in a lower public health status than other women living in the same city. In addition, because of their living conditions, slum women are exposed to various kinds of violence and stress that have a negative relationship with their mental health status [47].

Food insecurity is another intermediate determinant of health that is linked to the health of people based on the WHO model. The results of various studies show that low income is clearly an important determinant of food insecurity, although other factors such as limited access to food assistance programs, low education, and the number of family

members are also associated with increased food insecurity. In a study by Yadegari et al. [48], they found that food insecurity through stress, body mass index, and depression affects pregnancy outcomes, and this is consistent with the results of the reviewed studies. Social support and social capital are other intermediate determinants associated with mental health. According to the results of the studies, the more inappropriate supportive roles these people had, the more difficulties and mental disorders they experienced. According to a model presented by Nieminen et al. [49] on the relationship between social capital and social support with mental health, these 2 factors directly and indirectly influence the mental health of patients. As discussed, social determinants of health, owing to their importance and role, are increasingly being identified as factors influencing individuals' physical and mental health, and these health predictors require more attention.

In conclusion, structural determinants, i.e., gender and social class (education, job, income, and socioeconomic status) were most frequently associated with mental health. Among the intermediate determinants, living conditions, food insecurity, social capital, and social support were most frequently associated with mental health. The mental health of women, who constitute half of the suburban community and the foundation of families, should be considered as the highest level of health. Extensive social support and planning for the employment of women and their family members as well as helping improve their income and enhancing their socioeconomic status can improve their mental health, as women in these areas are more prone to having poor mental health. Improving the socioeconomic status ensures food security for women, thus improving their nutritional status.

Limitations of this study include women's unwillingness to participate in women's studies, self-reporting and information recall by women, the use of a tool for mental health screening in studies, the greater likelihood of slum women residing in an area to participate in the study, the lack of representativeness, and the lack of access to full texts of a few articles.

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Conflict of interest

No potential conflicts of interest relevant to this article were reported.

Ethical approval

This study was approved by the Alborz University of Medical Sciences with ethical code IR.ABZUMS.REC.1398.161.

Patient consent

None.

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