

The most important risk factors affecting mental health during pregnancy: a systematic review

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Abstract

Background: Pregnant women comprise a vulnerable population owing to the changes they experience in various stages that affect their mental health. Mental health problems affects nearly one-fifth of pregnant women during the prenatal and postpartum periods. Millennium Development Goals 4 and 5 focus on maternal and child health and specify that overall health cannot be reached without mental health.

Aims: The aim of this comprehensive systematic review was to evaluate research evidence on the determinants of antenatal mental health disorders among Iranian women.

Methods: Using a systematic literature review of observational studies in English and Farsi we focused on Iranian women being evaluated for the determinants of antenatal mental health problems. PubMed, Scopus, ISI Web of Science, Scientific Information Databases (SID), Global Medical Article Limberly, Iranian Biomedical Journal and the Iranian Journal Database were independently searched to identify articles published during 2000–2016.

Results: Thirty-one studies met the inclusion criteria and the results showed a significant relationship between antenatal mental health risks and variables such as lack of social support, marital status, domestic violence, unintended pregnancy and socioeconomic status. The paucity of high quality research evidence limited proper evidenced-based planning and generating results deemed essential to address antenatal mental health issues for Iranian pregnant women.

Conclusions: Our results showed that socioeconomic status and marital quality are the most important risk factors for disturbing mental health among Iranian pregnant women.

Keywords: mental health, pregnancy, postpartum, risk factors

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Introduction

Mental health is a major health issue worldwide and an important factor in social mobility and efficacy (1) and pregnancy is a unique maternal experience with significant psychological, physiological and biochemical effects on women (2). Pregnant women are vulnerable because of changes they experience in the stages of pregnancy that may affect their mental health (3–5). Mental health problems affects nearly one-fifth of pregnant women during the prenatal and postpartum periods, which could last up to a year (6), and may lead to poor health for the mother, father and infant (7,8).

While some women overcome their mental health problems, many develop a chronic state (9). An international call to action by the World Health Organization (WHO) entitled “No health without mental health” has emphasized the importance of mental health issues and the major burden these have on resource-constrained countries with a limited health care budget (10).

A 2007 study showed that mental problems account for 7.4% of the global burden of disease measured (11). For this reason, mental health needs to be considered a single target

in the Sustainable Development Goals (12). Furthermore, Millennium Development Goals 4 and 5 give a greater focus on maternal and child health and indicate that overall health cannot be attained without mental health (13). Maternal mental health requires a clear definition for each of the related factors to assist healthcare providers develop effective preventive care programmes. Determining the related factors associated with mental health is necessary to reach Goals 4 and 5 and this review examines the factors contributing to antenatal mental health issues among Iranian women.

Methods

Sources

In this systematic review, all the existing published studies on the determinants for antenatal mental health problems among Iranian women were collected following the Preferred Reporting Items for Systematic Reviews guidelines (14). Articles in Farsi and English from 2000 to February, 2016 were retrieved from the Scientific Information Databases, Global Medical Discovery (GMD), Iranian Biomedical Journal (Iran Medex), and Iranian Journal Database (Magiran), and international databases such as PubMed/

Medline, Scopus, and ISI Web of Science. Relevant article and report references were found through electronic search and reviewed manually (Table 1).

Method of selection

The research team discussed and agreed on the data extraction process and the use of standard forms. Retrieved articles were studied and evaluated by the authors independently by having the first researcher extract data and a second researcher evaluate for revision. In the case of any disagreement, the opinion of a third person was sought and considered. The information from all the studies (including authors, title, year of publication, type of study, sampling method and sample size, subjects' age and prevalence) was examined and any risk for bias reduced by indicating "insufficient information." Data summary forms helped identify and select relevant studies after systematic review. A summary of the study design characteristics is given in Table 2.

Quality assessment of articles

The quality of articles were blindly assessed by 2 independent experts using the Mirza and Jenkins checklist and in case of any disagreement a third reviewer would evaluate the articles for a final decision with consideration for the opinion of other 2 reviewers. The article evaluation checklist for selected studies included: precision and clarity of study goals, adequate sample size, representative sample with justification, clarity of inclusion and exclusion criteria, reliability and validity of mental health measurement tools, response rate for questionnaires completed and excluded samples, adequate explanation of data, and appropriate statistical analysis (15). The quality assessment assigned a score of 1 for "acceptable" and 0 for "unacceptable", with a maximum score of 9.

To ensure the accuracy of the extracted scores, another reviewer examined the process. Authors independently assessed, appraised, discussed and reached their final consensus on the scores.

Studies published during 2000–2016 which focused on predictive factors or showed a relationship between mental health and pregnancy were included. Those studies with pregnancy as their main inclusion criteria and some of the Iranian studies which only evaluated the

effect of pregnancy on mental health after delivery were excluded.

Results

Compilation and interpretation of data

From a total of 1255 reviewed articles for related subjects, titles and abstracts, the researchers selected 30 for in-depth evaluation and quality assessment (Table 3). Articles which used descriptive-analytical methodology, cohort studies and a cross-sectional approach were included. Researchers reviewed study results in order to implement content analysis and form categories.

Studies without a discussion on the contributing factors to mental health in pregnancy (1140 articles) or those, which only discussed mental health after delivery (84 articles) were excluded. The total number of women included in all the reviewed studies was 10 465, with a mean of 267 (standard deviation 304.8).

Tools

Various assessment tools were used to evaluate mental health. For instance, 6 (19.4%) used the General Health Questionnaire (GHQ-28); 12 (38.7%) used The Beck Depression Inventory; 4 (12.9%) used the Edinburgh Postnatal Depression Scale; 3 (9.7%) used the Symptom Checklist 90 (SCL-90); 2 (6.5%) used the Depression Anxiety Stress Scale (DASS-21); 1 (3.2%) used the Spielberger State-Trait Anxiety Inventory; 2 (6.5%) used the Pregnancy Related Anxiety Questionnaire; and 1 (3.2%) used the Pregnancy Stress Rating Scale.

Maternal mental health-related factors during pregnancy

The results of the 30 articles included in this review are shown in Table 4.

Six articles discussed the relationship between social support (family, friends and spouse) and mental health during pregnancy; 2 of these studied social support in general and coming from any source with a significant effect on mental health (16,17). Two others found a strong negative association between the level of husband's emotional support and the level of depression in pregnant women (18,19). Also, Rabieipoor et al. reported that women

Table 1 Details of the search strategy

Database	Search terms	Yield
PubMed	"Mental health" AND "Depressive disorder" OR "Depression" AND "Anxiety" AND "Pregnancy" AND "Iran"	160
Elsevier	"Mental health" AND "Depressive disorder" OR "Depression" AND "Anxiety" AND "Pregnancy" AND "Iran"	547
Scopus	"Mental health" + "Depressive disorder" + "Depression" + "Anxiety" + "Pregnancy" + "Iran"	48
Scientific Information Databases (SID)	Mental health + Depression + Anxiety + Pregnancy + Iran	34
Iranian Biomedical Journal (Iran Medex)	Mental health + Depression + Anxiety + Pregnancy + Iran	165
Iranian Journal Database (Magiran)	Mental health + Depression + Anxiety + Pregnancy + Iran	128
Global Medical Discovery (GMD)	Mental health + Depression + Anxiety + Pregnancy + Iran	173

Table 2 Design characteristics and rank score of studies included in the systematic review (n = 31)

Study	Clear study aims	Adequate sample size	Representative sample	Clear inclusion & exclusion criteria	Measure of mental health valid and reliable	Response rate reported and losses given	Adequate description of data	Appropriate statistical analysis	Appropriate informed consent procedure	Total score
Asltoghiri et al.	1	1	1	0	1	1	0	1	1	7
Abdollahzade Rafi et al.	1	1	1	1	1	1	0	1	1	8
Shahmiri et al.	1	1	1	0	1	1	0	1	0	6
Pazandeh et al.	1	1	1	1	1	1	1	1	0	7
Omidvar et al.	1	1	1	0	1	1	1	1	0	7
Mossalanejad et al.	1	1	1	0	1	1	1	1	0	7
Ghasemi et al.	1	1	1	1	1	1	1	1	1	9
Salmalian et al.	1	1	1	1	1	0	1	1	0	7
Sadeghi et al.	1	0	1	0	1	1	1	1	0	6
Nazari et al.	1	1	1	0	1	1	0	1	1	7
Babanazari et al.	1	1	1	1	1	1	1	1	1	9
Garrusi et al.	1	1	1	1	1	1	0	1	0	7
Parsaie Rad et al.	1	0	1	1	1	1	1	0	1	7
Forouzandeh et al.	1	1	1	1	1	0	1	1	1	8
Mortazavi et al.	1	1	1	1	1	1	1	1	0	8
Moshki et al.	1	1	1	1	1	1	1	1	0	8
Kheirabadi et al.	1	1	1	1	1	1	0	1	1	8
Shishegar et al.	1	1	1	1	1	1	0	1	1	8
Abbaszadeh et al.	1	1	1	1	1	1	1	1	0	8
Baghi et al.	1	0	1	1	1	1	1	1	0	7
Rabeipour et al.	1	1	1	1	1	1	1	1	0	8
Rezaee et al.	1	1	1	1	1	1	0	1	1	8
Hosaynisazi et al.	1	1	1	1	1	1	1	0	1	8
Hosseini Nasab et al.	1	0	1	1	1	1	0	1	1	8
Zareipour et al.	1	1	0	1	1	1	1	0	0	6
Enayati et al.	1	0	1	1	1	1	0	0	1	6
Zarei et al.	1	0	1	1	1	1	1	1	1	8
Amanat et al.	1	0	1	1	1	1	1	1	1	8
Bondad et al.	1	1	1	1	1	1	0	1	1	8
Lalooei et al.	1	1	1	1	1	1	1	0	1	8
Modabernia et al.	1	0	1	1	1	1	1	0	1	7

In the overall assessments, the mean quality assessment score for the selected studies was 7.48 out of 9.

whose husbands participated in prenatal care had better mental health (20). However 1 study found no significant relationship between level of social support and mental health (21).

Eight studies discussed the relationship between marital quality (marital communication and marital satisfaction) and mental health during pregnancy; 3 of these revealed that women who were more satisfied regarding marital communication had a lower level of depression (18,22,23). One study showed that women in conflict with

their husbands had more depression (24). Three of the studies revealed that women who reported lower marital satisfaction experienced greater anxiety and depression (18,25,26).

Fifteen articles discussed unintended pregnancy and mental health, with 5 reporting no significant relationship (20,21,24-26) and 7 studies reported more mental problems among women who had unwanted pregnancy (17,27-32).

Stress could be measured in different ways in different studies. Our review examined articles that addressed

Table 3 Characteristics of studies included in the systematic review (n = 31)

Study	Study type	Setting	Sample size	Mean maternal age (years)	Gestational age at screening	Assessment instrument
Asltoghiri et al. 2011	Prospective descriptive-analytical	Hamedan	161	26.4	28–30w 38–40w	BDI
Abdollahzade Rafi et al. 2008	Correlational	Shiraz	95	26.2	Third trimester	EPDS, SSQ, PSA
Shahmiri et al. 2006	Descriptive–analytical	Zanjan	300	26.2	3 trimesters	SDS
Pazandeh et al. 2002	Cross-sectional	Tehran	580	25.5	3 trimesters	BDI
Omidvar et al. 2007	Descriptive–analytical	Babol	191	25.4	3 trimesters	BDI
Mossalanejad et al. 2007	Cross-sectional	Jahrom	214	–	3 trimesters	SCL-90-R
Ghasemi et al. 2003	Cross-sectional	Tehran	1452	25.3	3 trimesters	SCL-90-R
Salmalian et al. 2007	Cross-sectional	Babol	263	25.6	Third trimester	BDI
Sadeghi et al. 2014	Longitudinal	Bandar Abbas	71	28.2	29–32w 33–36w 37–42w	STAI
Nazari et al. 2014	Descriptive–analytical	Khorramabad	280	26.7	3 trimesters	GHQ
Babanazari et al. 2008	Descriptive cross-sectional	Rasht	286	25.7	3 trimesters	PRAQ, GRIMS
Garrusi et al. 2014	Cross-sectional		255	29.1	3 trimesters	BDI
Parsaie Rad et al. 2010	Cross-sectional, analytical	Ahvaz	70	24.8	36–40w	PSQI, BDI
Forouzandeh et al. 2002	Descriptive–analytical	Shahrekord	267	24.9	3–4m 6–7m & 9	GHQ-28
Mortazavi et al. 2013	Longitudinal	Shahroud	358	24.32	Third trimesters	GHQ-28
Moshki et al. 2015	Cross-sectional	Gonabad	208	25.32	3 trimesters	EPDS
Kheirabadi et al. 2010	Prospective cohort	Isfahan	1291	–	3 trimesters	EPDS
Shishehgar et al. 2014	Cross-sectional	Shahriar	210	27	3 trimesters	PSQ
Abbaszadeh et al. 2013	Case–control	Kashan	465	25.32	3 trimesters	BDI
Baghi et al. 2013	Cross-sectional	Saqquez	140	27.40	Second and third trimester	EPDS
Rabeipour et al. 2015	Descriptive–correlational	Urmia	275	27.25	3 trimesters	GHQ-28
Rezaee et al. 2014	Cross-sectional	Babol	142	24.38	3 trimesters	DASS-21
Hosaynisazi et al. 2005	Cross-sectional	Tehran	180	26.40	3 trimesters	BDI
Zareipour et al. 2012	Cross-sectional	Kuhdasht	250	25.5	3 trimesters	GHQ-28
Enayati et al. 2008	Cross-sectional	Ahvaz	150	–	3 trimesters	SCL-90-R
Zarei et al. 2012	Cross-sectional	Tehran	267	29.5	3 trimesters	DASS-42
Ahmadzadeh et al. 2007	Descriptive–analytical	Isfahan	600	26.0	3 trimesters	BDI
Bondad et al. 2002	Descriptive–analytical	Mashad	320	24.5	3 trimesters	BDI
Lalooei et al. 2007	Cross-sectional	Tehran	400	26.4	3 trimesters	BDI
Modabernia et al. 2009	Cross-sectional	Rasht	415	–	3 trimesters	BDI

– = not known. SCL-90-R = Symptom Checklist-90-Revised. PTSD = Post-Traumatic Stress Disorder Diagnostic Scale. HSC-25 = Hopkins Symptoms Checklist. BDI = Beck Depression Inventory-II. EDS = Edinburgh Postnatal Depression Scale. SSQ = Social Support Questionnaire. PSA = Pregnancy-Specific Anxiety. SDS = Zung Self-Rating Depression Scale. SCL-90-R = Symptom Checklist-90-Revised. STAI State-Trait Anxiety Inventory. PRAQ = Pregnancy Related Anxiety Questionnaire. GRIMS Golombok-Rust Inventory of Marital Status. PSQI = Pittsburgh Sleep Quality Index. PSQ = Pregnancy Stress Questionnaire. GHQ = General Health Questionnaire DASS21 = Depression Anxiety Stress Scale.

important aspect of stress-provoking life events. There were 3 studies reporting a direct and significant correlation between negative life events and depression (23,24,27), including pregnancy.

Four studies reported a direct and moderate correlation between sleep quality, breathing interruption during sleep and poor mental health. Pregnant women are among those who suffer from interrupted and poor quality of sleep,

affecting their mental health (33–36).

Three articles studied the relationship between sex of the fetus and mother's mental health in pregnancy and reported conflicting results: 2 studies found no significant relationship (20,37) and 1 indicated that the level of anxiety among mothers was related to undesirable sex of the fetus (28).

Twelve articles discussed the relationship between

Table 4 Factors associated with mental health in studies included in the systematic review (n = 31)

Study	Dependent variable	Results	
		Observed association, positive or negative	No association
Asltoghiri et al. 2011	Depression	Sleep problems (positive)	
Abdollahzade Rafi et al. 2008	Depression	Social support level (negative)	
	Anxiety		Social support
Shahmiri et al. 2006	Depression	Quality of marital communication (negative) Being employed (negative) Poor socioeconomic status (positive) Parity (positive)	Maternal age Woman's education level
Pazandeh et al. 2002	Depression	Social support level Woman's educational level (negative) A history of premenstrual syndrome (positive) Having medical disorders (positive) Unwanted pregnancy (positive) Separation from parents before age 15 years (positive) Parity (positive)	Socioeconomic status Being employed Maternal age
Omidvar et al. 2007	Depression	The age difference between couples (positive) Marital dissatisfaction (positive) Quality of marital communication (negative) Stressful events (positive) Woman's education level (negative) Being employed (negative)	Parity Unwanted pregnancy
Mossalanejad et al. 2008	Mental health	Marital satisfaction (positive) Parity (negative)	Unwanted pregnancy
Ghasemi et al. 2003	Mental health	History of infertility History of abortion Woman's educational level (positive)	Economic status
Salmalian et al. 2007	Depression	History of abortion (positive) Unwanted pregnancy (positive) Pregnancy complications (positive) Maternal age (positive) Disturbing events (positive) Socioeconomic level (negative) Husband's education level (positive) Parity (positive) History of poor pregnancy outcomes (positive)	Employment of women Living in extended family History of depression
Sadeghi et al. 2014	Anxiety	Being employed (negative)	Maternal age, Woman's education level History of abortion Sex of fetus
Nazari et al. 2014	Mental health	Unwanted pregnancy (negative)	Woman's education level Economic status
	Anxiety	Undesirable sex of fetus (positive)	
	Depression		Sex of fetus
Babanazari et al. 2008	Anxiety	Marital satisfaction level (negative) Woman's education level (negative)	Unwanted pregnancy Socioeconomic status
Garrusi et al. 2014	Depression	Perceived poor body image (positive)	
Parsaie Rad et al. 2010	Depression	Sleep problems (positive)	
Forouzandeh et al. 2002	Mental health	Marital satisfaction (positive) Quality of marital communication (positive) Marital dissatisfaction (negative) Unwanted pregnancy (negative) Having medical disorders (negative) Stressful events (negative) History of mental health problems (negative) Being employed (positive)	Woman's education level Parity Unwanted pregnancy History of infertility Economic status
Mortazavi et al. 2013	Mental health	Poor economic status (negative) Parity (negative)	
Moshki et al. 2015	Depression	Social support (negative)	

Table 4 Factors associated with mental health in studies included in the systematic review (n = 31)

Study	Dependent variable	Results	
		Observed association, positive or negative	No association
Kheirabadi et al. 2010	Depression	History of depression (positive) Unplanned pregnancy (positive) Being a housewife (positive) Parity (positive)	
Shishegar et al. 2014	Stress	Job level of husband (positive)	Woman's education level Socioeconomic status
Abbaszadeh et al. 2013	Depression	Quality of life (negative)	Maternal age Parity Economic status Social support Unwanted pregnancy
Baghi et al. 2013	Depression	Sleep problems (positive)	
Rabeipour et al. 2015	Mental health	Parity (negative) Husbands participation level (positive) Maternal age (negative)	Unwanted pregnancy Sex of the fetus Socioeconomic status Woman's education level Woman's employment status
Rezaee et al. 2013	Depression	Woman's education level (negative)	Economic status Body mass index Parity
	Anxiety	Pregnancy complications (positive)	Maternal age Woman's education level Economic status
Hosaynisazi et al. 2005	Depression	Employment of pregnant woman (negative) Quality of marital communication (negative) Living in expanded family (positive) Husband's job level (negative) Unplanned pregnancy (positive) Woman's education level (negative) Husband's education level (negative) Husband's emotional support (negative) Domestic violence (positive) Parity (positive)	Maternal age History of infertility
Zareipour et al. 2012	Mental health	Unwanted pregnancy (negative) Maternal age (negative) Parity (negative) Poor socioeconomic status (negative) Woman's education level (positive)	Husband's education level Employment status of woman Living in expanded family Husband's job type History of abortion
Enayati et al. 2008	Mental health	Unwanted pregnancy (negative)	
Zarei et al. 2012	Anxiety	History of infertility (positive)	
Ahmadzadeh et al. 2007	Depression	Unwanted pregnancy (positive)	History of abortion Woman's education level Being an employed
Bondad et al. 2002	Depression	Sleep problems (positive)	
Lalooei et al. 2007	Depression	History of abortion (positive) Maternal age (positive) History of depression (positive)	
Modabernia et al. 2009	Depression	Woman's education level (negative) Being employed (negative) Parity (positive)	Maternal age Socioeconomic status

parity or number of children and maternal mental health and reported conflicting results: 7 articles found a positive and significant relationship (17,29,22,25,27,29,30) and another 5 studies showed no significant relationship (2,23,24,37,38).

Nine studies evaluated the relationship between obstetric history and complications and maternal mental health during pregnancy and reported contradictory results. Regarding infertility, 2 of 4 articles reported

that poor mental health status was related to a history of infertility (39,40). Regarding abortion, study results were contradictory with 3 reports of a significant relationship between a history of abortion and mental health (27,39,41) and 3 studies finding no significant relationship (32,27,40). Also, Salmalian et al. and Rezaei et al. reported that depression level among pregnant women was positively related to complications of pregnancy (27,38).

Three articles reported a positive and significant relationship between maternal depression during pregnancy and a history of mental problems (23,29,42).

Demographic factors

Regarding maternal age, 4 studies showed that mental problem among pregnant women had a significant positive relationship with maternal age (22,27,30,41), while another 6 articles reported no significant relationship (17,18,21,37,38,42). Omidvar et al. focused on maternal age difference with husband as a possible contributing factor and found that younger pregnant women with elderly husbands had more mental health problems (24).

The relationship between mental health and socioeconomic factors, including women's education level, economic status, and employment status, were evaluated in many studies: 2 showed that pregnant women with poor economic status experienced more depression (18,22), but 8 did not find any such relationship (17,20,23,26,28,38,39,43).

Studies on a woman's employment status and mental health during pregnancy generated conflicting results, where 5 studies showed no significant relationship between women's mental health and their employment status (17,20,27,30,37), and 4 studies found more mental problem among employed pregnant women (18,22,23,29). Two studies reported a strong relationship between husband's job and maternal mental health (18,27).

There were 13 studies exploring the relationship between a woman's education level and their spouses and maternal mental health levels during pregnancy. Six of these reported a moderate negative relationship between mothers' educational level and their mental health (17,18,27,30,39,44) while 7 found no significant relationship (20,22,23,28,37,38,43). Also, a significant positive relationship was found between husband's education level and maternal mental health (18,27), contradicted in 1 report (30).

Two studies reported that the type of family arrangement had no significant relationship with maternal mental health during pregnancy (27,30), but Hosaynisazi et al. reported that mental problems in pregnant women who lived in the extended family had poorer level of mental health (18).

Only 1 study focused on the relationship between domestic violence and women's mental health during pregnancy, and reported a significant and adverse relationship between husband's physical and sexual violence toward his pregnant spouse and her mental health (18).

Additional factors with inconsistent findings

Researchers found significant maternal mental problems

positively related to maternal body mass index (38), history of premenstrual syndrome, and being separated from parents before the age of 15 (17). Regarding desirable body image and mental health during pregnancy, 1 study showed that women who had a positive outlook in regard to their body image had lower level of depression (45).

Discussion

There have been many systematic reviews about factors affecting mental health problems during pregnancy and afterward throughout the world, but the present study is the first systematic review that has been conducted in the Islamic Republic of Iran.

In general, previous studies have shown that antenatal mental problems were not directly related to economic status in low- to moderate-income countries (46), but other risk factors such as cultural practices had reciprocal effects on each other and contributed to severe mental disorders (47,48). For instance, a study from Pakistan reported that financial problems and illiteracy had a direct relationship with anxiety and depression, while family support reduced mental health problems in pregnancy (15). In 2010, another systematic review indicated that life stresses, history of depression, lack of social support, domestic violence, unintended pregnancy and poor communication were associated with antenatal depression (49).

This systemic review found a list of contributing factors for antenatal mental health problems, including lack of social support, type of relationship with husband, marital satisfaction, unintended pregnancy, stressful life events and domestic violence. According to Iranian published research, the quality of the relationship with the husband and marital satisfaction were associated with mental health issues, similar to results from high-income countries: women whose husbands welcomed their pregnancy experienced more emotional support and a better state of mental health (13). This is consistent with findings of Iranian studies, which reported a healthier mental state for pregnant women who had their husband's acceptance and support during pregnancy (30,40). Our review identified marital quality as the strongest antenatal anxiety-related factor, and this was directly associated with mental problems during pregnancy, clearly demonstrating the important role of husbands in enhancing or aggravating anxiety during pregnancy. A poor marital relationship was the most consistent variable in predicting anxiety during pregnancy and one of the most important factors for managing emotional upheavals by recruiting the husband's support to reach a desired outcome. Marital discord resulted in a lack of maternal attachment to the fetus and family unit: pregnant women experienced a high level of anxiety and expressed disgust toward pregnancy.

The conflicting findings on unwanted pregnancy and mental health indicated that unintended pregnancy by itself did not affect mental health, but when combined with poor socioeconomic status or lack of social support and pregnancy acceptance, women exhibit mental problems. Other research has emphasized the effect of socioeconomic status on mental health in association with unintended

pregnancy; in contrast, the husband's emotional support during pregnancy was associated with improved mental health (50).

We found that economic burdens during pregnancy affected mental health and more educated and employed women who received adequate health services tended to have a healthier mental state. In fact, more educated and employed women in low-income countries showed lower risk for mental health problems during pregnancy (13). Therefore, employment and financial independence increased women's participation in social activities and improved their mental health coping skills.

The results of this systemic review demonstrate that mental health in pregnancy is significantly affected by social issues, support systems, and communication within the family dynamic. These contributing factors can be modified from the social perspective through public

education and policy changes to improve antenatal mental health.

The lack of reporting statistical values, including odds ratio and risk ratio, is the most important limitation of this systematic review. Therefore, we could not estimate the effect size of each mental health-related factor. Nevertheless, our results showed that socioeconomic status and marital quality are the most important risk factors for disturbing mental health among Iranian pregnant women. Our findings could be used as a guide to educate and train clinicians to recognize the risk factors and screen women at every prenatal visit and monitor for mental health concerns.

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Facteurs de risque les plus importants affectant la santé mentale pendant la grossesse : analyse systématique

Résumé

Contexte : Les femmes enceintes constituent une population vulnérable du fait des changements dont elles font l'expérience à différentes étapes qui affectent leur santé mentale. Les troubles de santé mentale touchent près d'un cinquième des femmes enceintes durant les périodes prénatale et postpartum. Les objectifs du Millénaire pour le développement n° 4 et 5 se concentrent sur la santé de la mère et de l'enfant, et spécifient que la santé en général ne peut être atteinte si la santé mentale n'est pas assurée.

Objectif : La présente étude systématique détaillée avait pour objectif d'évaluer les données issues de la recherche menée sur les déterminants des troubles de santé mentale pendant la grossesse parmi les femmes iraniennes.

Méthodes : À l'aide d'un examen systématique de la littérature portant sur les études d'observation en anglais et en farsi, nous nous sommes concentrés sur l'évaluation des déterminants des problèmes de santé mentale pendant la grossesse chez les femmes iraniennes. Des recherches indépendantes ont été menées dans PubMed, Scopus, Web of Science, Scientific Information Database (SID), Global Medical Article Limberly, Iranian Biomedical Journal et Iranian Journal Database afin d'identifier les articles publiés entre 2000 et 2016.

Résultats : Trente et une études répondaient aux critères d'inclusion, et les résultats obtenus démontraient un lien significatif entre les risques de santé mentale pendant la grossesse et des variables telles que le manque de soutien social, le statut marital, la violence domestique, une grossesse non désirée et le statut socio-économique. Le manque de données de recherche de qualité constituait un frein à la planification reposant sur des bases factuelles, ainsi qu'à la génération de résultats jugés essentiels pour le traitement des problèmes de santé mentale pendant la grossesse chez les femmes iraniennes.

Conclusions : Nos résultats ont montré que le statut socio-économique et la qualité de la vie conjugale étaient les facteurs de risque les plus à même de perturber l'état de santé mentale des femmes enceintes iraniennes.

عوامل الخطر المهمة المؤثرة على الصحة النفسية أثناء الحمل : استعراض منهجي

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الخلاصة

الخلفية: تشكل النساء الحوامل إحدى الفئات السكانية المعرضة للخطر بسبب التغيرات التي تشهدها خلال مراحل الحمل المختلفة والتي تؤثر على صحتهم النفسية. فتؤثر مشكلات الصحة النفسية على نحو خمس النساء الحوامل خلال مرحلتَي الحمل والنفاس. ويركز الهدفان ٤ و ٥ من الأهداف الإنمائية للألفية على صحة الأم والطفل ويشيران إلى أن الصحة العامة لا يمكن تحقيقها دون الصحة النفسية.

الأهداف: هدف هذا الاستعراض المنهجي الشامل إلى تقييم البراهين البحثية المتعلقة بمحددات الاضطرابات النفسية أثناء الحمل في أوساط النساء الإيرانيات.

طرق البحث: ركزنا على النساء الإيرانيات اللاتي يجري تقييم محددات مشكلات الصحة النفسية لديهن أثناء الحمل وذلك باستخدام استعراض

منهجية للدراسات القائمة على الملاحظة باللغتين الإنجليزية والفارسية. وتم البحث بشكل منفصل في قواعد البيانات PubMed وScopus وشبكة العلوم ISI وقاعدة بيانات المعلومات العلمية (SID) ومجلة (Global Medical Article Limberly) ومجلة البيولوجيا الطبية الإيرانية وقاعدة بيانات المجالات العلمية الإيرانية، وذلك لتحديد المقالات التي نشرت خلال الفترة ٢٠٠٠-٢٠١٦.

النتائج: استوفت ٣١ دراسة معايير الإدراج وأظهرت النتائج علاقة دالة بين مخاطر الصحة النفسية أثناء الحمل ومتغيرات مثل نقص الدعم الاجتماعي والوضع العائلي والعنف الأسري والحمل غير المقصود والحالة الاقتصادية الاجتماعية. وأدت ندرة البراهين البحثية عالية الجودة إلى الحد من التخطيط السليم القائم على البراهين وتحقيق نتائج عدت أساسية للتصدي لمشكلات الصحة النفسية للنساء الحوامل الإيرانيات.

الاستنتاجات: أظهرت نتائج الدراسة أن الحالة الاقتصادية الاجتماعية وجودة العلاقة الزوجية هما أهم عاملين من عوامل الخطر للإصابة باضطراب الصحة النفسية لدى النساء الحوامل الإيرانيات.

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