


# BMJ Open Job satisfaction and psychosocial factors and their association with job performance in Iranian midwives: a cross-sectional study

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## ABSTRACT

**Background** The global shortage of midwives and their job performance can significantly affect the quality of care for mothers, newborns, and their families.

**Objectives** This study aimed to determine the status of job satisfaction and psychosocial factors and their relationships with the job performance of midwives in Tabriz City, Iran.

**Design** Cross-sectional study.

**Setting** Urban health centres and public and private hospitals in Tabriz, Iran.

**Participants** A total of 575 midwives were included in this study using census sampling from November 2022 to January 2023. Inclusion criteria were midwives with at least B.Sc. degrees and 6 months of work experience while midwives with a history of depression were excluded from the study. The occupational-social-demographic characteristics questionnaire, Copenhagen Psychosocial Questionnaire and Woman-Centred Care Scale Midwife Self-Report were used to collect data. The Pearson correlation test was used to investigate the relationship between job satisfaction and psychosocial factors in midwives' job performance. In multivariate analysis, the general linear model (GLM) adjusting for occupational-social-demographic characteristics was also used.

**Results** According to the Pearson correlation test, there was a significantly direct correlation between job satisfaction ( $r=0.21$ ,  $p<0.001$ ) and psychosocial factors ( $r=0.23$ ,  $p<0.001$ ) with job performance. Also, as suggested by the GLM, midwives' job performance increases as job satisfaction ( $\beta=0.05$ , 95% CI 0.01 to 0.11,  $p=0.044$ ) and psychosocial factors ( $\beta=0.13$ , 95% CI 0.04 to 0.23,  $p=0.007$ ) increase.

**Conclusions** There was a direct relationship between midwives' job satisfaction and psychosocial factors and their job performance.

## INTRODUCTION

Manpower mainly contributes to providing services that guarantee organisational survival.<sup>1</sup> Therefore, the primary requirement for achieving customer and external stakeholder satisfaction is the job satisfaction of the human resources.<sup>2</sup> In general, job satisfaction is an emotional state arising from job evaluation or job experience, defined as

## STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ A sample size of 575 midwives was selected, with a census sampling method.
- ⇒ There was diversity in the participants (midwives working in urban health centres, public and private hospitals).
- ⇒ Midwives' workplaces were also different (delivery room, postpartum, maternal, high-risk, emergency and clinic sections).
- ⇒ Establishing any causal relationship of different variables with job performance is beyond the scope of this study.
- ⇒ Midwives may face social desirability bias because they may not truly reflect their job performance for fear of losing their occupational positions.

meeting the main job needs in a working environment and the sense of efficacy, suggesting an individual's positive or negative attitude to his job.<sup>3</sup>

Considering the critical role of the midwifery profession in sexual, reproductive, maternal, newborn and adolescent health (SRMNAH), the United Nations Fund for Population Activities has required improving working conditions as a way to attract midwives in midwifery.<sup>4</sup> According to the third global State of the World's Midwifery report (2021), a global shortage of 900 000 midwives has been estimated. If the current trend continues, it is predicted that this figure will only decrease slightly (to 750 000) by 2030. It is also estimated that the current midwifery workforce is unable to meet more than 75% of the world's need for essential SRMNAH interventions.<sup>5</sup> Additionally, midwives are the largest group of healthcare providers in Iran, and approximately 33 208 midwives are active in the Iranian healthcare system.<sup>6</sup>

Challenges of Maternal Health Programme from Iranian Midwives' Perspectives include human resources, information management, service continuity and cultural barriers.<sup>7</sup> The

shortage of midwifery forces has been a global problem, with the WHO expressing concern over it. Despite large efforts worldwide to make reformative changes, retaining midwives in the profession is still a large problem for health systems.<sup>8</sup> Currently, job dissatisfaction is considered as the main contributor to the loss of midwifery forces.<sup>9</sup> The findings of a systematic review in Iran (2022) about job satisfaction and related factors in midwives working in health centres indicated that midwives' job satisfaction was average. The highest satisfaction pertained to occupational position and cooperation with colleagues while the lowest satisfaction pertained to occupational salaries and incentives.<sup>10</sup>

In midwifery, high job satisfaction outcomes include positive working relations with others, the ability to develop relations with women, independence and the full use of midwifery skills in health centres.<sup>11</sup> On the other hand, weak job satisfaction is associated with declining care quality and midwives' non-retention in midwifery.<sup>12</sup> As a result, identifying key factors affecting job performance can help support evidence-based strategies to increase the outcomes of women's healthcare quality.<sup>13</sup>

Job performance refers to an individual's professional success, which is evaluated by comparing his success in behaviour and organisational expectations.<sup>14</sup> Studies have demonstrated a relationship between midwives' job satisfaction and job performance.<sup>15 16</sup> Job satisfaction is a major factor involved in increasing staff job performance. It is well established that dissatisfied employees do not work effectively in the workplace.<sup>17</sup> Mirmolaei *et al* demonstrated that 49%, 49.4% and 1.6% of midwives reported low, moderate and high job satisfaction, respectively.<sup>18</sup>

In addition to job satisfaction, another important factor that affects the job performance of midwives is psychosocial factors.<sup>19</sup> The American Psychological Association<sup>20</sup> defines psychosocial factors as 'the intersection and interaction of social, cultural and environmental influences on the mind and behaviour'. Key psychosocial factors in a healthy work environment include the ability to establish good relationships between management and employees, effective leadership, a strong organisational culture, management support and reducing work–family conflict. Studies have also demonstrated that many employees in developing and developed countries suffer from workplace psychosocial factors, which could lower life quality and dampen motives and labour return.<sup>21</sup> Thus, controlling workplace psychosocial factors enables midwives to develop their professional identity and support basic knowledge and professional bravery.<sup>22</sup>

The first step in designing programmes to maintain or improve job performance is to evaluate the quality of medical care.<sup>23</sup> Care quality in midwifery is mainly characterised by woman-centred care, equivalent to midwifery care.<sup>24</sup> Studies have demonstrated that a woman-centred care model is the most effective way to develop and maintain interpersonal relations.<sup>11</sup> In this connection, Wakelin and Skinner suggested midwives need relations with their clients to maintain their performance.<sup>25</sup> Also, Curtis *et al*

examined the causes of midwives' job dissatisfaction in Britain, noting a direct relationship between the care model provided by midwives and their job satisfaction.<sup>12</sup>

Midwives are at the forefront of providing health services and their performance indicates the quality of healthcare. Consequently, addressing the job satisfaction of midwives becomes increasingly necessary. It seems that midwives' job performance is related to job satisfaction and psychosocial factors of the work environment. Hence, this study aimed to determine the relationship between midwife job satisfaction and workplace psychosocial factors with their job performance in Tabriz, Iran.

## METHODS

### Patient and public involvement

Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

### Study design, participants and setting

This cross-sectional study was carried out on 575 midwife staff at urban health centres, public and private hospitals in the city of Tabriz.

### Recruitment and sampling

The present study collected data via census sampling from all urban health centres (92 centres), public hospitals (Al-Zahra, Taleghani, Imam Ali and Alghadir of Naja) and private hospitals (Shahryar, Shams, Behboud and International Vali-Asr) of Tabriz City, Iran. The census method is a statistical counting method in which all members of the population are included. In the present study, all eligible midwives willing to participate in the study, from the specified health centres and hospitals were approached for the study.

### Inclusion criteria

Inclusion criteria were midwives working at urban health centres, public and private hospitals, residence in Tabriz, having a working history of at least 6 months and having at least B.Sc. degrees.

### Exclusion criteria

Midwives with a history of depression, taking antidepressants (eg, tricyclics, serotonin reuptake inhibitors, monoamine oxidase, serotonin and norepinephrine reuptake inhibitors), a history of stressful incidents (observable adverse, unplanned, non-normative and/or uncontrollable events), including divorce, the death of a first-degree member of the family and the diagnosis of a member of the family with a terminal disease over the past 3 months.

After investigating the inclusion and exclusion criteria, the researcher explained the study methods and objectives to qualified midwives. Then, if midwives were willing to attend the study, they obtained written consent forms. Of the 575 midwives, 350 were from health centres, 130 were from public hospitals and 95 were from private hospitals. Data were collected through

the occupational-social-demographic characteristics questionnaire, Copenhagen Psychosocial Questionnaire (COPSOQ III) and Woman-Centred Care Scale Midwife Self-Report (WCCS-MSR) to investigate midwives' job performance. The questionnaires were coded and filled in without citing names to protect midwives' privacy.

### Data collection tools

The method of data collection was self-administered. The average time to complete the questionnaires was approximately 20 min.

#### Occupational-social-demographic characteristics questionnaire

The occupational-social-demographic characteristics questionnaire consisted of two parts: (1) demographic data, including age, husband's age, marital age, marital status, income adequacy and husband's occupation and (2) occupational data, including education, employment sector, employment status, years of service and hours worked per week.

#### Copenhagen Psychosocial Questionnaire

The first version of the COPSOQ scale was developed in 1997 by the Denmark National Research Center (Kristensen *et al*) for the workplace as a standardised scale that covered a large spectrum of psychosocial factors.<sup>26</sup> This scale consists of 3 long (141 items and 30 dimensions), medium (for workplace experts with 95 items and 26 dimensions) and short (for workplaces with 44 items and 8 dimensions) forms.

The present study used the psychometric version of the questionnaire (shortened form) by Aminian *et al* in Iran.<sup>27</sup> This questionnaire has four factors, including factor 1: quality of leadership (items 21 and 22), social support from supervisors (items 23 and 24), rewards (items 17 and 18), justice and respect (items 30 and 31), trust (items 28 and 29) and predictability (items 15 and 16), factor 2: self-rated health (item 32), burn-out (items 33 and 34), stress (items 35 and 36), work-family conflict (items 26 and 27) and emotional demands (item 5), factor 3: meaning of work (items 11 and 12), commitment to the workplace (item 13), influence at work (items 7 and 8) and role clarity (items 19 and 20) and factor 4: offensive behaviour (items 39 through 43). This questionnaire has 32 items on a 5-point Likert scale, with some scores reversely scored. Polarisation on the Likert scale is different between the scales. For instance, as for the scales of demands at the workplace, higher scores indicate a higher risk of work-related stress, while for the scales of development opportunities or impact on work, lower scores indicate a higher risk of work-related stress. Judgment is made based on the total scores derived from the average responses given to the items, as responses range from 0 (never/hardly ever to a very small extent) to 100 (always to a large extent) by considering the reverse scores items. The conversion of items from 1–5 to 0–100 in most studies is performed to compare the results when using various COPSOQ versions. The validity and reliability of

the scale were established by Kristensen *et al* in Denmark (Cronbach's  $\alpha$  ranging from 0.68 to 0.81).<sup>26</sup> The validity and reliability of this scale in Iran were also established (Cronbach's  $\alpha$  ranging from 0.75 to 0.89) by Aminian *et al* (2017), while the internal consistency coefficient was determined to range from 0.75 to 0.89.<sup>27</sup>

#### Job satisfaction

Job satisfaction was also measured with a four-item COPSOQ III scale.<sup>26</sup> The four items about job satisfaction concern the following: (1) How much are you satisfied with your working perspective? (2) How much are you satisfied with your physical work conditions? (3) How much are you satisfied with the method that uses your abilities? and (4) Does your job as a whole consider everything? Participants answered these items on a 5-point Likert scale, ranging from 0 to 100, with higher scores indicating higher job satisfaction.

#### Woman-Centred Care Scale Midwife Self-Report

The WCCS-MSR was used to investigate the status of midwives' job performance.<sup>28</sup> This scale was designed by Davis *et al* in 2021 for the first time and includes five domains, including Meets the unique needs of the woman (MUN\_W, 12 items), balances the woman's needs within the context of the maternity service (BWN\_MS, 5 items), ensures midwifery philosophy underpins practice within the context of the maternity service (EMPUP\_MS, 4 items), working collaboratively for evidence-based practice (WC\_EBP, 7 items) and works in partnership with the woman (WP\_W, 12 items). This questionnaire consists of 40 items of a 7-point Likert scale (from very untrue of me (1) to very true of me (7)). The minimum score of this questionnaire was 40, and the maximum score was 280. Higher scores indicate a higher level of woman-centred care by midwives. The internal consistency of the scale in Australian midwives was reported to be 0.92 by using Cronbach's alpha.<sup>28</sup> In the Iranian context, Mashayekh-Amiri *et al*<sup>29</sup> reported the validity and reliability of the scale using Cronbach's alpha and McDonald's omega, as 0.94, while its internal consistency was 0.98.

#### Statistical analysis

The statistical software of SPSS (IBM, V.25.0) was used to analyse data. Occupational-social-demographic characteristics, job satisfaction, psychosocial factors and job performance (woman-centred care) were determined using descriptive statistics, including frequency, percentage, mean and SD. To assess the normality of quantitative data, visual inspection, skewness and kurtosis were used, indicating the normal distribution of data. The Pearson correlation test was used in bivariate analysis to investigate the relationship between job satisfaction and psychosocial factors in midwives' job performance (woman-centred care).

In multivariate analysis, the general linear model (GLM) with adjusting the occupational-social-demographic characteristics was also used. Assumptions checked for the



analytical methods used in GLM include (1) The residual normality was checked using the normal probability plot and confirmed, (2) The homogeneity of residual variance was checked using the scatter plot of residual versus predicted plot and confirmed, (3) The independence of residual was checked using the residual sequence plot and confirmed, (4) The lack of outliers was checked using the scatter plot and confirmed and (5) The lack of collinearity was checked using the variance inflation factor (VIF), all values were less than 5 and confirmed.

The independent t-test and one-way analysis of variance (ANOVA) were used to determine the relationship between midwives' occupational-social-demographic characteristics and their job performance (woman-centred care). The variables of job satisfaction and psychosocial factors entered the model as independent variables. In contrast, job performance, that is, woman-centred care, entered the model as the independent variable. The occupational-social-demographic variables that had a significant relationship with job performance ( $p < 0.05$ ) were also entered into the model as potential confounders to control for their effects. A  $p < 0.05$  was considered statistically significant.

## RESULTS

### Participants' characteristics

A total of 575 midwives with a participation rate of 85% entered the study. Sociodemographic and occupational characteristics of the midwives are summarised in [table 1](#).

### Demographic data

The mean (SD) age of the midwives, husband's age and marital age were 38.0 (7.9) (minimum and maximum ages of 23 and 64, respectively), 42.9 (8.5) (minimum and maximum age of 21 and 71, respectively) and 25.6 (4.4). Almost half of all midwives (49.6%) reported their income levels as adequate, and 74.8% were married. 40% of the midwives had husbands working as employees.

### Occupational data

Around 19% of the midwives were junior midwives (with a work history of less than 5 years) while 81% were senior with a work history of 5 or over 5 years. Almost half of midwives (46.6%) held a contractual employment status. Over half of them (60.9%) were working at health centres. A majority of whom (90.4%) were B.Sc. Over half of the midwives (67.8%) reported working from 37 to 48 hours.

### Status of job satisfaction, psychosocial factors and job performance

The total mean (SD) of the job satisfaction, psychosocial factors of the workplace and job performance scales were 53.28 (24.18) (scores ranging from 0 to 100), 53.43 (13.24) (scores ranging from 0 to 100) and 72.13 (11.93) (scores ranging from 0 to 100), respectively. Regarding job satisfaction, the midwives obtained the highest mean (SD) scores from the use of the ability (58.70 (28.51))

while receiving the lowest scores from the physical working conditions (48.70 (28.09)) (scores ranging from 0 to 100). In terms of workplace psychosocial factors, the highest and the lowest scores were, respectively, related to commitment to the workplace (79.30 (25.09)) and burn-out (40.11 (25.05)) (scores ranging from 0 to 100). Also, in terms of job performance, the highest score pertained to the WP-W subscale (77.95 (14.85)) while the lowest score to the BWN-MS subscale (61.66 (15.43)) (scores ranging from 0 to 100). Status of job satisfaction, psychosocial factors and job performance of the midwives are summarised in [table 2](#).

### The relationship between job satisfaction, psychosocial factors and job performance

According to the Pearson correlation test, there was a significant direct correlation between job satisfaction ( $r = 0.21$ ,  $p < 0.001$ ) and workplace psychosocial factors ( $r = 0.23$ ,  $p < 0.001$ ) with job performance.

According to bivariate tests of one-way ANOVA and independent t-test, there was a significant relationship between occupational-social-demographic demographic factors, including marital status ( $p = 0.008$ ), employment status ( $p = 0.020$ ) and years of service ( $p = 0.038$ ) and the total score of job performance. These variables, job satisfaction and psychosocial factors entered the GLM as independent variables. The adjusted GLM results showed that by adjusting midwives' occupational-social-demographic characteristics, there was a statistically significant relationship between job satisfaction and psychosocial factors with job performance, as an increase in the job satisfaction score ( $\beta = 0.05$ , 95% CI 0.01 to 0.11,  $p = 0.044$ ) led to an increase in the job performance score. Also, an increase in psychosocial factors scores ( $\beta = 0.13$ , 95% CI 0.04 to 0.23,  $p = 0.007$ ) led to an average increase in job performance scores. The relationship of job satisfaction and psychosocial factors with job performance based on GLM in Iranian midwives is summarised in [table 3](#).

## DISCUSSION

As far as the study is concerned, the present study was carried out for the first time to investigate midwives' job satisfaction, workplace psychosocial factors and their relationship with their job performance at urban health centres, public and private hospitals in Tabriz, Iran. Findings showed that midwives obtained average scores in job satisfaction, workplace psychosocial factors and job performance. There was a direct relationship between midwives' job satisfaction and psychosocial factors with their job performance.

Job satisfaction total scores in the present study indicated that midwives reported a medium level of job satisfaction, with their job satisfaction scores in the dimensions of Work Prospects and the Use of Ability and Whole Everything being higher than the average level, while a little lower than the average level in the dimension of physical working conditions. Low job satisfaction

**Table 1** Occupational-social-demographic characteristics of Iranian midwives (n=575)

Characteristics	Mean (SD)	Relationship with job performance (WCC)	
		r	P value
Age (year)	38.0 (7.9)	0.038	0.363*
Husband's age (year)	42.9 (8.5)	-0.028	0.569*
Married age (year)	25.6 (4.4)	0.004	0.930*
	Number (%)	Mean (SD)	P value
Marital status			
Single	131 (22.8)	216.89 (22.79)	0.008†
Married	430 (74.8)	216.33 (27.20)	
Divorced	14 (2.4)	193.50 (55.39)	
Income adequacy			
Completely adequate	44 (7.7)	223.68 (21.01)	0.059†
Relatively adequate	285 (49.6)	216.75 (25.39)	
Inadequate	246 (42.8)	213.53 (30.36)	
Husband's occupation			
Employee	230 (40.0)	216.43 (28.12)	0.758†
Specialists managers	44 (7.7)	218.43 (20.42)	
Self-employed	148 (25.7)	215.10 (27.46)	
Education			
Bachelor degree	520 (90.4)	215.97 (27.74)	0.840‡
Master degree or above	55 (9.6)	215.25 (24.54)	
Employment sector			
Public	130 (22.6)	215.97 (22.71)	0.972†
Private	95 (16.5)	215.29 (29.51)	
Health canter	350 (60.9)	216.04 (28.50)	
Employment status			
Compulsory service programme	41 (7.1)	213.44 (23.58)	0.020†
Official experimental	18 (3.1)	196.72 (45.81)	
Official definitive	248 (43.1)	216.23 (24.28)	
Contractual	268 (46.6)	217.26 (28.78)	
Hours worked per week			
18–36 hours	55 (9.6)	214.20 (25.81)	0.890†
37–48 hours	390 (67.8)	216.08 (27.59)	
<48 hours	130 (22.6)	216.07 (27.80)	
Years of service			
>5 years	109 (19.0)	211.00 (30.53)	0.038‡
≥5 years	466 (81.0)	217.05 (26.56)	

\*Pearson correlation.

†One-way ANOVA.

‡Independent sample t-test.

ANOVA, analysis of variance; WCC, woman-centred care.

in the dimension of satisfaction with working conditions may be due to the fact that midwives have lower satisfaction rates with their working conditions because of occupational conflicts with gynaecologists, high workload, the lack of sufficient powers and the lack of opportunities for expressing their competence.<sup>30</sup>

Consistent with the findings of the present study, Nour *et al* in their study used the Job Descriptive Index to investigate job satisfaction among 275 employed midwives in the city of Tehran, concluding that most units under research (80%) held average job satisfaction. Out of the five dimensions of job satisfaction, most midwives held

**Table 2** Job satisfaction, psychosocial factors and job performance status and the relationships of job satisfaction and psychosocial factors with job performance in Iranian midwives (n=575)

Variables	Mean (SD)	Obtained score range	Obtainable score range	Relationship with job performance	
				r	P value*
Total score of job satisfaction	53.28 (24.18)	0–100	0–100	0.21	<0.001
Work prospects	50.43 (27.84)	0–100	0–100	0.16	<0.001
Physical working conditions	48.70 (28.09)	0–100	0–100	0.17	<0.001
Use the ability	58.70 (28.51)	0–100	0–100	0.19	<0.001
Whole everything	55.30 (27.13)	0–100	0–100	0.21	<0.001
Total score of psychosocial factors	53.43 (13.24)	15.32–86.72	0–100	0.23	<0.001
Quality of leadership	45.22 (26.96)	0–100	0–100	0.13	0.002
Social support from supervisors	49.13 (31.54)	0–100	0–100	0.09	0.021
Rewards	41.26 (28.61)	0–100	0–100	0.09	0.026
Justice and respect	45.22 (26.96)	0–100	0–100	0.13	0.002
Trust	60.35 (24.15)	0–100	0–100	0.16	<0.001
Predictability	60.04 (24.32)	0–100	0–100	0.16	<0.001
Self-rated health	61.43 (27.97)	0–100	0–100	0.17	<0.001
Burn-out	40.11 (25.05)	0–100	0–100	0.09	0.020
Stress	43.57 (22.56)	0–100	0–100	0.14	0.001
Work–family conflict	40.33 (26.71)	0–100	0–100	0.08	0.057
Emotional demands	40.48 (21.88)	0–100	0–100	0.02	0.663
Meaning of work	77.37 (24.32)	0–100	0–100	0.23	<0.001
Commitment to the workplace	79.30 (25.09)	0–100	0–100	0.22	<0.001
Influence at work	70.28 (20.31)	0–100	0–100	0.26	<0.001
Role clarity	65.43 (24.56)	0–100	0–100	0.20	<0.001
Offensive behaviour	54.25 (12.65)	8.33–75	0–100	0.08	0.058
Total score of job performance (WCC)	72.13 (11.93)	0–100	0–100	–	–
MUN-W	76.57 (14.03)	0–100	0–100	–	–
BWN-MS	61.66 (15.43)	0–100	0–100	–	–
EMPUP-MS	65.18 (15.48)	0–100	0–100	–	–
WC-EBP	71.46 (14.49)	0–100	0–100	–	–
WP-W	77.95 (14.85)	0–100	0–100	–	–

\*Pearson correlation test.

BWN-MS, balances the woman's needs within the context of the maternity service; EMPUP-MS, ensures midwifery philosophy underpins practice within the context of the maternity service; MUN-W, meets the unique needs of the woman; WCC, woman-centred care; WC-EBP, working collaboratively for evidence-based practice; WP-W, works in partnership with the woman.

average satisfaction in the dimension of job nature while expressing low satisfaction in other dimensions, including being a direct supervisor, relation with colleagues, promotion opportunities, salaries and incentives.<sup>30</sup> Also, the results of Lobsiger and Liechti's study in Germany with a survey of 2000 midwives indicated that many midwives were dissatisfied with the recognition of their work (43%) and the adjustment of their family life to work (33%). Over one-third of the midwives (39%) were not satisfied with their general working conditions while over one-fifth (22%) of them did not choose their profession once again.<sup>31</sup>

Midwives in the present study acquired average scores regarding workplace psychosocial factors. Midwives suffer from many psychosocial factors. Psychosocial factors are divided into two positive and negative categories; the former refers to quality of leadership, social support from supervisors, rewards, justice and respect, trust, predictability, self-rated health, meaning of work, commitment to the workplace, influence at work and role clarity while the latter refers to burnout, stress, emotional demands, work–family conflicts and offensive behaviours.<sup>26</sup>

The mean values of the COPSOQ III scale in the present study varied from 40.1 for burn-out to 79.3 for

**Table 3** The relationship of job satisfaction and psychosocial factors with job performance based on general linear model in Iranian midwives (n=575)

Variables	$\beta$ (95% CI)	P value
Job satisfaction	0.05 (0.01 to 0.11)	0.044
Psychosocial factors	0.13 (0.04 to 0.23)	0.007
Marital status (reference: divorced)		
Single	8.99 (2.59 to 15.40)	0.006
Married	8.11 (1.97 to 14.25)	0.010
Employment status (reference: contractual)		
Compulsory service programme	1.08 (-3.42 to 5.57)	0.638
Official experimental	-7.65 (-13.14 to -2.17)	0.006
Official definitive	-0.80 (-2.80 to 1.19)	0.430
Years of service (reference: $\geq 5$ )		
<5	-3.85 (-6.78 to -0.93)	0.010
Significant variables ( $p < 0.05$ ) in the bivariate analysis were included in a multivariate analysis.		

commitment to the workplace. Results indicated that midwives obtained the lowest and the highest scores in burn-out and commitment to the workplace, respectively. Also, midwives received higher-than-average scores in positive dimensions such as commitment to the workplace, the meaning of work, influence at work and role clarity while receiving less-than-average scores in such dimensions as emotional demands, stress, burn-out and work-family conflicts, indicating the lower effects of negative factors in their workplace. Compared with findings by Lincke *et al* (2021) on 257 236 participants from 966 surveys on risk assessment in companies throughout Germany, midwives, as suggested by the present study, received higher scores in the dimensions of influence on work, meaning of work and commitment to the workplace. However, German midwives received higher scores in the dimension of role clarity. On the other hand, occupational burn-out scores in the present study were lower.<sup>32</sup> Also, compared with another study in Sweden,<sup>33</sup> the scores of meaning of work and role clarity dimensions were almost identical. However, the scores of commitment to the workplace and influence dimensions in the present study were higher. Burn-out scores in the Swedish study were lower than those of studies in Germany and the present study.

Midwives' job performance is also affected by many factors. One of the significant aspects of midwives' job performance is the quality of care they provide for women. In the present study, considering the provision of woman-centred care, midwives' total job performance scores were at an average level, with almost half of them having higher-than-average job performance. Midwives' job performance in three WP-W, WC-EBP and MUN-W dimensions was higher than the average level while in

two BWN-MS and EMPUP-MS dimensions, it was at an average level.

Midwives scored the highest from the WP-W dimension and the lowest from the BWN-MS dimension. Consistent with the present study, the study by Davis *et al* to investigate the job performance of midwives with a focus on woman-centred care among 319 midwives in Australia and New Zealand showed that the midwives held the highest score from the WP-W dimension, while receiving the lowest score from the EMPUP-MS dimension.<sup>28</sup> The results of the present study indicated that midwives are capable of working in partnership with the woman. However, domains such as balances the woman's needs within the context of the maternity service and ensures midwifery philosophy underpins practice within the context of the maternity service, require more attention and focus to improve job performance.

This study showed that job satisfaction was statistically and significantly related to job performance. Consistent with our study, the study by Hadizadeh Talasaz *et al* about the relationship between job satisfaction and job performance among 90 midwives working at Mashhad's Health Centres through Minnesota Job Satisfaction Questionnaire demonstrated a direct correlation between job satisfaction and total job performance scores. Also, a direct relationship was noted between job satisfaction and the quality of educational, care and communication performance.<sup>15</sup>

On the other hand, Fallah and Bajalan investigated the job satisfaction of 100 midwives working at Qazvin's maternity hospitals in Iran. The data collection tools consisted of the Wysocki & Kromm Job Satisfaction and Pater-son's Job Performance. They suggested no significant correlation between job satisfaction and job performance scores. Most midwives (60%) had low job satisfaction, as the highest job satisfaction pertained to satisfaction with authorities (55%) and the lowest to satisfaction with salaries and incentives (34%).<sup>16</sup> The difference between this study and ours is due to the different methodologies of the two studies because the above study only investigated the obstetric ward and 100 midwives. In contrast, the present study used a census sampling method to include all urban health centres, public and private hospitals in the city of Tabriz, and also all hospital wards, including the labour and delivery room, postpartum, maternal, high-risk mothers, emergency and clinic sections.

The literature shows that employees with higher job satisfaction are in a better physical position and mental capacity and thus provide better and high-quality service care.<sup>34</sup> In the health section, job satisfaction is strongly associated with the quality and efficiency of services, improved job performance, patient satisfaction and reduced medical costs.<sup>35</sup> Meanwhile, job dissatisfaction disrupts physical and mental health, causes stress among employees, increases intraorganisational conflicts and work-related accidents, and increase absenteeism and employee turnover, thus reducing organisational efficiency, job performance and efficacy. These factors



threaten healthcare organisations' capacity to provide high-quality care and meet patient needs.<sup>36</sup>

The present study demonstrated that the total scores of all psychosocial workplace factors, excluding two emotional demands and offensive behaviour, were significantly related to midwives' job performance. Midwives received the highest scores in the meaning of work, influence on work and commitment to the workplace, significantly associated with job satisfaction. Consistent with the present study, Hansson *et al* demonstrated that midwives reported a higher level of work meaningfulness, as meaningfulness was associated with job satisfaction.<sup>19</sup>

Job satisfaction comes from midwives feeling useful and professional when working with pregnant women. This finding was in line with those of Bloxsome *et al*,<sup>11</sup> which emphasised the usefulness and significance of work. In the Swedish study, midwives reported higher undesirable demands, a lack of influence and understanding in the workplace, role conflict, higher occupational burnout, low effects on work and low organisational justice compared with Swedish benchmarks, which offer basic psychosocial factors at the workplace.<sup>18</sup> This is while occupational burn-out, stress and emotional need scores in the present study were lower than the Swedish study and Swedish benchmarks. The results indicated that Iranian midwives were less influenced by negative factors such as stress and burnout in their work environment, which can effectively help their job performance.

### Strengths and limitations

This study for the first time investigated the status of job satisfaction and workplace psychosocial factors and their relationship with job performance in Iranian midwives. The main advantage of the study was its use of the census sampling method. Also, diversity in the participants was another advantage of the present study because the midwives' workplaces (health centres, public and private hospitals) and even the wards where midwives worked were different (delivery room, postpartum, maternal, high-risk mothers, emergency and clinic sections). In contrast, previous studies had only focused on midwives working in labour and delivery wards.

However, the present study suffered from some limitations. This study was cross-sectional and could not examine the causal relation of different variables with job performance. In addition, midwives may face social desirability bias because they may not truly reflect their psychosocial factors and job performance due to the fear of losing their occupational positions. Also, failure to take samples among midwives working in rural health centres may affect study findings. In sum, more longitudinal studies in Iran are warranted to identify the predictors of job performance, job satisfaction and psychosocial factors.

### Conclusions and implications for the workplace

There was a direct relationship between midwives' job satisfaction and workplace psychosocial factors and their

job performance. Thus, managers and policy-makers must consider interventions and provide organisational support to improve midwives' job performance and high-quality care. In order to achieve this goal, equipment should be provided in the workplace for midwives. Attention should be paid to the demands of midwives regarding workload reduction, night shifts and time limits for midwives to provide care. Considering an incentive system to create motivation for midwives, avoiding activity in unrelated professions and ensuring their professional independence seems necessary. Additionally, approaches such as developing transparent guidelines for professional promotion, employing experienced staff in managerial positions and correcting the negative attitude of managers to create real changes in organisations through interviews, could be helpful.

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