

# The relationship between mental health and resilience in Midwives working in Kurdistan province, 2017-2018

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## ABSTRACT

**Introduction:** Mental health as one of the main factors in improving the quality of life is influenced by various factors such as individual, social and occupational diversity. The mental health of midwives is always at risk due to the stressful nature of this profession. Therefore, the present study was conducted to survey the Mental Health and Its Relationship with Resilience in Midwives working in Kurdistan Province, 2017-2018. **Material and Methods:** This descriptive-analytic study was conducted from December 2017 to May 2018. The research population included all midwives with inclusion criteria in Kurdistan province and. sample size was considered equal to the research community. The data collection tool was questionnaire including three parts: demographic questionnaire, Goldberg General Health Questionnaire and Conner Davidson resilience questionnaires. **Results:** According to findings, a significant positive correlation was showed between mental health with resilience ( $p<0.01$ ), and also physical symptoms ( $p<0.01$ ) Anxiety ( $p<0.01$ ), social function ( $p<0.01$ ) and depression as mental health subscales. Also, there was a positive significant difference between the level of resilience with physical symptoms ( $p<0.01$ ), anxiety ( $p<0.01$ ), social function ( $p<0.01$ ) and depression ( $p<0.01$ ) subscales. **Conclusion:** The results of this study showed that with the increase in the resilience score of the samples, their mental health level increase. On the other hand, people with higher resilience show higher degrees of mental health. Therefore, by providing suitable fields for increasing the resilience, we can promote the mental health of midwives.

**Keywords:** Mental health, Resilience, Midwife.

## Introduction

The topic of health has always been important from the very beginning of humanity. In the present century, neurological stress and mental health problems affect the majority of people's lives in the workplace, the social and the family environment. Accordingly, the World Health Organization (WHO) has defined health as the presence of complete

physical, psychological, social and spiritual well-being, and not just the absence of a disease or deficiency of an organ <sup>[1]</sup>. Thus, it appears that the concept of health is multidimensional and involves a sense of happiness and well-being in addition to the lack of illness and disability <sup>[2]</sup>. According to, the World Health Organization, while paying attention to the authorities of countries to provide the physical, psychological and social health of people, emphasizes that none of the three dimensions is superior to the other <sup>[3]</sup>. Therefore, attention to various dimensions of the health of people in the community is one of the important issues of the country's health plans <sup>[4]</sup>.

As one of the dimensions of health, mental health is one of the main factors in improving the quality of life <sup>[5]</sup>. Ganji in his book has defined mental health like the following: "Any individual who can deal with his own problems, compromise with himself and others, resists against internal conflicts and does not alienate himself from society is considered mentally healthy <sup>[2]</sup>. Others define mental health as the lack of disease, having emotional balance, social

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reconciliation, comfort, and the integrity of personality and recognizing oneself and the surrounding environment <sup>[6]</sup>.

According to the available evidence, various factors such as individual life, social and occupational diversity have affected the mental health of people <sup>[6]</sup>. 919 million people, who often live in developing countries, are directly affected by mental illness or disability <sup>[7]</sup>. In the EU, 165 million people suffer from mental disorders. These disorders account for over 50% of the general population in developed and developing countries <sup>[8]</sup>. The prevalence of these disorders was 29.7% in the United States, 15.5% in England, 13.2% in China, 12.9% in Singapore, and 12% in Nigeria. According to the results of Noorbala et al. study, the prevalence rate of mental disorders was 23.6% (26.5% in women and 20.8% in men) in Iran and 36.9% in Tehran <sup>[9]</sup>. The World Health Organization (WHO) has stated that if urgent measures are not taken to prevent the occurrence of a mental illness, it will be recognized as the most common disease in the world by 2030 <sup>[10]</sup>.

Physical and mental health is very important in terms of normal actions and behaviors that are in accordance with social standards. Mental illness imposes huge emotional and economic burden upon the shoulder of families and society, which causes the highest rates of disability in countries <sup>[11]</sup>. In the United States, healthcare and medical care is associated with the highest levels of occupational injury <sup>[12]</sup>. According to McAlister et al. (2009), the highest attention was paid to organizational factors, management, external factors and neglect of internal factors. Due to the nature of these types of occupations that are associated with stress, this stratum suffers from stress, exhaustion and disregard, and this has made experienced forces, in most cases, relieve work in health centers. Nowadays, in order to maintain the mental health of people in high-risk occupations, apart from reducing the stressful resources, various resources of individuals, such as resilience, are being strengthened <sup>[12]</sup>.

Pinquart (2009) defines Resilience as one's confidence in his ability to overcome stress, coping ability, emotional stability, and individual characteristics that increase social support for others <sup>[13]</sup>. Resilience is not just hanging on in the face of threat or unpleasant conditions <sup>[14]</sup>; it, rather, is the process of successful capability and adaptation to threatening conditions. Resilience is in fact the ability to overcome difficulties <sup>[15]</sup>. Positive adaptation can also be considered as a result of resilience and a higher level of it <sup>[16]</sup>. Individuals with high resilience are more flexible than others, adapt easily to environmental conditions, and return to normal when stressful conditions are resolved <sup>[17]</sup>. According to the results of some studies, there is a relationship between two variables of mental health and resilience <sup>[18, 19]</sup>; i.e. people with high resilience for various reasons, including resistance to stress, overcoming difficulties, adaptive response to adverse conditions, and high social ability can overcome life's problems, maintain their mental health and thus have enough satisfaction with their personal, professional and social lives <sup>[18, 20, 21]</sup>. Resilience is essential for getting successful in a job. Therefore, individuals need to increase their resilience in order to face up to the

negative experiences and to turn them into positive experiences in order to overcome difficulties and hardships. Resilience is an important factor in some of the most at-risk groups; it represents a very important mediator role in the development of many psychiatric disorders <sup>[18]</sup>. According to McAlister et al. (2009), working conditions for nurses are very difficult and can cause psychological and biological harm to them. Hence, resilience is of paramount importance for such individuals to gain success in their occupational life <sup>[11]</sup>.

Midwifery is also one of the most stressful and important jobs that play a key in counseling, education, care, support and treatment of mother and child, as well as education for girls in the field of puberty health. In recent years, midwifery, the "being with women" philosophy and self-centered care have become the center of heated discussions. Midwives now describe the quality of their relationship with women as the primary source for the satisfaction, motivation and basic nature of midwifery care. To have such relationships, they must have emotional conflicts with the person being cared for, a situation which can increase stress, tension and burnout, or cause major damage to mental health and the ability to provide emotional care continuously <sup>[22]</sup>. Since in any health care system, the presence of healthy, creative and capable human resources contributes to the fulfillment and advancement of goals, and given the key role of the midwife in achieving this goal, paying attention to the mental health of such medical specialists is of great importance; therefore, the present study was conducted to determine the relationship between mental health and resilience in midwives working in Kurdistan province in 2017-2018.

## Material and Methods

This present analytic descriptive study was conducted on all midwives working in Kurdistan province in 2017-2018. Of the 650 midwives in Kurdistan province, 635 subjects who met the inclusion criteria participated in this study.

Being willing to participate in the study, being employed in state centers, at least one year of work experience, lack of known mental illness, non-use of psychosocial drugs, non-complicated physical illness, neuroticism, and lack of tension in the last six months (death of close relatives, divorce, distancing from close relatives) were the main inclusion criteria and the only exclusion criteria was filling the questionnaires incompletely.

A three-part questionnaire was used to collect required data; the first part was related to individual information (15 items), the second part of the general health questionnaire was 28-item Goldberg questionnaires and the third part of the questionnaire was 25-item questionnaires of Conner Davidson's resilience scale. 28-item Goldberg questionnaires was designed and tested by Goldberg and Hiller (1979). This instrument has 4 sub-scales of physical symptoms, anxiety, social dysfunction and depression. Each of the sub-scales has 7 questions rated according to Likert 4 options, which are measured in 0, 1, 2, and 3 scales dimensions. The total score

of the subject is calculated from 0 to 84 variables, with 23-40 representing mild, 41-60 moderate and 61-81 severe mode. Nazifi et al. (2013) assessed the validity of the questionnaire through factor analysis, varimax rotation (KMO = 0.9869) and test reliability coefficient using Cronbach's and it turned out to be 0.74 [23].

Conner–Davidson Resilience Scale (CD-RISC): this scale measures resilience in 5-degree Likert measurements from always false to always true (from zero to four) in 25 positions; 0-50 represent low and 51-100 represent high resilience. This scale has been standardized by Kayhani et al. (2014) in Iran. Validity was confirmed by a confirmatory factor analysis method between 44% and 93%, indicating the validity of this structure. The reliability of the scale was also calculated using Cronbach's alpha and Spearman Brown's semiconductor method and the rates turned out to be 0.669 and 0.665 in order [24].

The content validity method was used to assess the validity of the researcher-made part of the tool's demographic section, so that the questions were provided to ten experienced faculty members and finally, after collecting and applying their views, a final questionnaire was prepared. The research has been approved under the code of 268 / 1396.REC.MUK.IR.

The researcher then provided the midwives with a questionnaire after explaining the method and objective of the study and obtaining oral and written consent of the subjects, and asked them to answer the questions in appropriate time and place; the subjects were asked to deliver the questionnaire back up to 72 hours after receiving it and contact the researcher in case of any questions or ambiguities. Sampling lasted from December 2017 to May 2018. After completing the sampling, collected data was analyzed by SPSS20, Chi-square, Pearson correlation coefficient and simple linear regression.

## Results

Based on the results, the majority of subjects were within the age range of  $33.8 \pm 7.51$  years; they had undergraduate education (79.4%), were married (62.2%), lived in the city (97.3%), did not have children (58%), had monthly income equal to what they had to spend (58.3%), were employed (31.7%), and had average working experience of 2.9 years. 55.7% of the subjects were working in health centers and 44.3% worked in medical centers. The majority of the husbands of subjects had government jobs (58.5%), bachelor's degree (47.9%) and personal housing (74.8%).

According to the findings, the majority of subjects high resilience (86.1%) and were mentally healthy (55.9%) (Table 1). Also, there was a significant positive relationship between the level of resilience and mental health (Table 2).

Based on the results of the study, there was a significant relationship between mean and standard deviation of mental health scores according to the degree of resilience of subjects under study (Table 4).

**Table 1. Frequency distribution of mental health and resilience among subjects**

|               | Variable              | Frequency | Percent |
|---------------|-----------------------|-----------|---------|
| Mental health | Healthy               | 355       | 55.9    |
|               | Suspected of disorder | 280       | 44.1    |
| Resilience    | Low                   | 88        | 13.9    |
|               | High                  | 547       | 86.1    |
| Total         |                       | 635       | 100     |

**Table 2. Frequency distribution of the mental health of subjects based on resilience**

| Resilience | Mental health |                       | P         |         |                 |
|------------|---------------|-----------------------|-----------|---------|-----------------|
|            | Healthy       | Suspected of disorder | Frequency | Percent |                 |
| Low        | 24            | 6.8                   | 64        | 22.9    | P=0.001<br>Df=2 |
| High       | 331           | 93.2                  | 216       | 77.1    |                 |
| Total      | 355           | 100                   | 280       | 100     |                 |

**Table 3. Mean and SD of mental health sub-scales among subjects**

| mental health sub-scales | Mean ± SD |
|--------------------------|-----------|
| Physical symptoms        | 6.75±3.75 |
| Stress                   | 6.42±4.08 |
| Social function disorder | 7.11±2.96 |
| Depression               | 3.02±3.69 |

**Table 4. Mean and SD of mental health sub-scales based on resilience among subjects**

| mental health sub-scales | resilience        |           |                          |            | P value |
|--------------------------|-------------------|-----------|--------------------------|------------|---------|
|                          | Physical symptoms | Stress    | Social function disorder | Depression |         |
| Low                      | 8.75±4.42         | 8.31±4.78 | 8.89±3.97                | 6.65±4.91  | 0.000   |
| High                     | 6.02±3.51         | 6.11±3.88 | 6.82±2.66                | 2.43±3.08  |         |

## Discussion

The present study was conducted in order to investigate the relationship between mental health and resilience among midwives working in Kurdistan province. Based on the results, 55.9% of the subjects were psychologically healthy and 44.1% were suspected of having disorder. Mental health involves the inner sense of being good, ensuring its efficiency, self-reliance and self-development [2]. When an individual does not have mental health and suffers from symptoms of a disorder, he or she is prone to fatigue, lack of energy and happiness, improper behavior, lack of sense of value and lack of attention to others. [25]

The results of Hasheminejad et al. (2011) study indicated that 39.2% of midwives working in Kerman Hospital were mentally healthy and 60.8% of them had some degree of mental disorders, while mental disorders in midwives working in government hospitals were more frequent than those

employed in private hospitals<sup>[26]</sup>, a rate which turned out to be higher than the present study; the reason for such a difference may be weakness in the organization of work, high numbers of clients, an inadequate number of midwives and other managerial aspects in the hospitals under study<sup>[26]</sup>. It seems that the individual situation as well as the conditions related to the environment of the subjects in the present study was more favorable than subjects studied in Hasheminejad et al study. Also, in Sadeghi's study (2010), 44.8% of nurses working at Shahid Rajai Hospital in Qazvin had a mental disorder mainly due factors affecting working environment<sup>[27]</sup>.

The results of Share et al study (2011) indicated that the mean mental health of anesthesia personnel in hospitals affiliated to Tehran University of Medical Sciences and Iran was  $21.69 \pm 3.67$ , which turned out to be slighter higher than the score obtained in the present study ( $22.83 \pm 11.84$ ), indicating better situation of subjects analyzed in that study in comparison with the present research. In any case, Share et al argue that many stressful occupations, including critical and emergency situations, facing severe illness and death, working with anesthetics, concentration, and high work precision, could justify a higher average score of mental health in these subjects<sup>[28]</sup>. Similarly, the higher mental health score among midwives working in Kurdistan province can be attributed to the increased exposure to critical situations, such as at risk of death of two members (mother and infant) and continuing stress in this field.

Also, the results of the present study showed that the most negative effect in mental health areas of midwives in Kurdistan province was related to disorder in social function; after social dysfunction, stress and physical signs were at the cutting point. The findings of this study indicate that midwifery has a negative impact on social performance, which can be explained by the work environment of some other disciplines that endangers the mental health of midwives and their social performance.

High anxiety among health care workers can be attributed to working in a stressful hospital environment, working pressure, facing unexpected situations, and organizational and individual factors. Accordingly, according to Hasheminejad et al. (2011), there was a significant relationship between mental health and occupational stress among midwives<sup>[26]</sup>. The results of Jafari et al. (2013) also showed that due to the nature of nursing occupational stress, the quality of nursing service with high mental health scores decreased due to various features such as anxiety, depression, negative and irrational thoughts, which, in turn, increases the risk of error and reduced mental health. It can also be said that social support is involved with tangible support components, emotional support, kindness, positive interaction and information in promoting mental health. Social support helps the nurses believe that they are not alone and they belong to a group that supports them in times of difficulty<sup>[29]</sup>.

Based on the results of this study, 86.1% of the subjects had high resilience and 13.9% had low resiliency; the mean resilience rate turned out to be was  $67.37 \pm 14.94$ . The mean resilience of pre-hospital emergency technicians in Guilan

province was  $55.27 \pm 8.45$  in Abrisham Kesh et al study (2013)<sup>[30]</sup>. In Bagherinia et al. (2015), the average score of nurses' resilience was  $59.75 \pm 25.06$ <sup>[31]</sup>. The mean of resilience in anesthesiologists of hospitals affiliated to Tehran University of Medical Sciences and Iran is  $67 \pm 14.67$ , a rate which turned out to be quite consistent with the present study<sup>[27]</sup>. Comparing these studies with the present study, it is determined that the mean of resilience scores in midwives in Kurdistan province is higher; probable cause can be searched in different work environments.

Additionally, the results of the present study showed a significant positive relationship between resilience and mental health in midwives working in Kurdistan province. In other words, midwives with high resilience had higher mental health. The result of Mortazavi et al. study (2015), which was based on the meta-analysis of mental resilience, indicated that there was a significant relationship between mental health and resilience, suggesting that individuals with high resilience for various reasons such as resistance to stress, overcoming of difficulties,<sup>[18]</sup> adaptive response to adverse conditions<sup>[20]</sup> and high social empowerment can overcome life's problems and maintain their mental health<sup>[21]</sup>. Also, the results of Poursardar et al. (2012) study showed that resilience and mental health have a direct effect on life satisfaction<sup>[32]</sup>. Abrisham Kesh et al. (2016) also argued that psychological and resilience is effective in maintaining and improving the mental health of pre-hospital emergency technicians<sup>[30]</sup>.

Also, the results of the study showed a significant relationship between resilience and physical symptoms, anxiety, social function and depression. Based on these findings, resilience had the highest impact on depression, physical symptoms, anxiety and social function, a fact which is consistent with Basharat's research (2013), in which there was a significant positive relationship between mental health scores and resilience, and there was a negative relationship between resilience and mental distress, cognitive anxiety and general health problems<sup>[33]</sup>. A study by Marlene Fur (2013) also found that stress and anxiety can be reduced by increasing resilience in nurses and midwives<sup>[22]</sup>. Also Antonucci and Lazarus argued that reduction of resilience to life events in a person is associated with a kind of psychological stress, anxiety and depression. As a result, with increasing resilience, psychological and emotional problems are resolved and mental health is increased<sup>[34]</sup>.

Resilience is a type of self-healing technique with positive emotional and cognitive outcomes that play an important role in increasing the level of mental health<sup>[35]</sup>; therefore, the higher the mental health of individuals, the lower their rate of anxiety, depression and physical symptoms and the more successful their social function becomes<sup>[36]</sup>. The results of Alawi et al. (2015) study indicated that employees who did not have the option to use their skills, did not have the power and freedom to make decisions, and received little support from their colleagues responsible had poor social support and had less mental health<sup>[37]</sup>. Ultimately, mental health problems will increase absenteeism and cessation of service, loss of

confidence in the workplace, and a reduction in job satisfaction, which will cause serious harm to the organization in the long run [38].

One of the strengths of this study is to conduct research on the level of Kurdistan province and on all midwives working in health centers. In addition, out of 650 possible subjects, 635 participated in the present study, which could be strength of the research. The weakness of this study includes limiting access to full text, summary and, in some cases, the abstract, of the articles.

According to the researchers, this study was carried out on midwives working in public and private centers in different parts of the country and with different occupational and environmental conditions; therefore, an interventional study is recommended on the effect of training on resilience skills and mental health of this group of care providers in the society.

## Conclusion

Based on the results of this study, resilience increased mental health among midwives working in Kurdistan province. Therefore, by creating suitable fields for increasing the level of resilience can help to promote the mental health level of these health care providers.

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## Abbreviation List

WHO: World Health Organization

KMO: Kaiser Meyer Olkin test

CD-RISC: Conner Davison- resilience Scale.

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