Assiut Scientific Nursing Journal
http://asnj.journals.ekb.eg http://www.arabimpactfactor.com
DOI: 10.21608/asnj.2025.346710.1973 http://olddrji.lbp.world/indexedJournals.aspx
https://vlibrary.emro.who.int/journals/assiut-scientific-nursing-journal

The Impact of Psychological Distress and Well-Being of Nurses on Quality of nursing care at Psychiatric Hospitals

Nada Abd El hafeez Mohamed[1], Nadia Ibrahim Sayed[2], Manal Abo Elil Abo Elghiet[3] & Sanaa Mostafa Khalifa[4]
[1.] Demonstrator at Psychiatric and Mental Health Nursing, Faculty of Nursing, Sohag University, Egypt
[2.] Professor of Psychiatric and mental Health Nursing, Faculty of Nursing, Assiut University, Egypt
[3.] Assistant Professor of Psychiatric and Mental Health Nursing, Faculty of Nursing, Assiut University , Egypt
[4.] Assistant Professor of Psychiatric and Mental Health Nursing, Faculty of Nursing, Sohag University, Egypt

Abstract
Background: The quality of nursing care is influenced by the psychological state of nurses. Psychological distress of nurses can negatively impact nurses' performance and competence. While psychological well-being improves quality of care. So, the organization should provide interventions to improve the psychological well-being and reduce psychological distress of nurses. **Aim of the study:** To assess the impact of psychological distress and well-being of nurses on quality of nursing care at psychiatric hospitals. **Research design:** Descriptive correlational research design. **Setting:** The study was performed at three hospitals. Psychiatric and neurological hospital at Assiut University, Assiut mental health hospital, and Sohag mental health hospital. **Sample:** Non-probability convenience sample includes all psychiatric nurses. **Tools:** Demographic characteristics data sheet, general health questionnaire, psychological well-being scale, and quality of nursing care scale. **Results:** More than two thirds of the studied nurses were females, more than half of studied nurses had secondary school of nursing, less than nearly one quarter of them suffer from moderate distress. **Conclusion:** psychological distress negatively impacts nurses' ability to provide high quality care. In contrast, high psychological well-being can enhance nursing care. **Recommendation:** Implementing stress management program to alleviate stress and improve nurses' psychological well-being in psychiatric settings.

Keywords: Psychological distress, Well-being & Quality nursing care

Introduction
Nurses are frontline healthcare professionals who identify, plan, and evaluate patients' needs, advocate for patients, administer medications and ensure their comfort **(Burhans & Alligood.,2020).** Nurses are the most critical human resource in providing quality healthcare **(Agussalim et al.,2020).** Quality nursing care is one of the factors that can increase patient satisfaction and positively affect patients' recovery processes. In addition, quality nursing care is highly effective in achieving targeted patient outcomes, protecting patients from possible dangers, preventing undesirable consequences, and ensuring patient safety **(Samsualam et al.,2021).**

Nurses are in close contact with patients and such factors as employment location, variety of hospitalized cases, lack of manpower, forced overtime hours, and the attitude of the ward manager can impose tremendous stress on nurses. Psychological distress causes job quit, co-workers conflict, health disorders, job dissatisfaction, reduced creativity, decreased professional satisfaction, reduced correct and timely decision-making, inadequacy and depression feelings, disgust and fatigue from work, reduced energy and work efficiency, and reduced quality of nursing care **(Babapour et al., 2022).**

Many factors contribute to elevated stress and negatively impact the well-being of nurses, including excessive workloads, lengthy shifts, a fast paced environment, a lack of physical or psychological security, ongoing nursing care, ethical dilemmas, perceived job stability, violence in the workplace, bullying at work, and a deficiency of peer support **(Woo & others, 2020).**

The research reviewed provides evidence that poor well-being hinders the performance of healthcare personnel, lowering the quality of patient care. Nurses who described their shifts as more stressful made more information-processing errors and were less likely to achieve their key performance indicators. Poor well-being also affects nurses' attitudes toward patients **(Kinman et al., 2020**). On the other hand, patients cared for by nurses who have higher levels of well-being are frequently more satisfied with their care and have better outcomes **(Arnetz et al., 2019).**

Therefore, decision-makers and healthcare administrators must take the initiative and take long-term responsibility for consistently highlighting the value of safeguarding the well-being of nursing personnel and reducing psychological distress. Establishing long-term screening and prevention programs is necessary to keep an eye out for early warning indicators and stop PTSD, burnout, and other mental health issues. **(Grobler., 2020).**

Significance of the study:

Mental health nurses face considerable risk of experiencing burnout, stress at work, and mental health conditions such as anxiety and depression. According to a study done in Egypt, only 24.9% of participants showed severe levels of burnout, while 66.0% had moderate levels **(Anwar & Elareed., 2017).**

Analysis of patients' complaint letters also suggests that Employee burnout can lead to unfavorable attitudes and inadequate communication, which can then negatively impact patients' emotional health **(Hogg et al., 2018).** On the other hand, nurses with strong psychological well-being will be more cooperative and efficient in their work and will serve patients well **(Kurniawan et al., 2021).** So this study will offer a chance to investigate the impact of psychological distress and psychological well-being of nurses on quality of nursing care in psychiatric hospitals.

Aim of the study:

To assess the impact of psychological distress and psychological well-being of nurses on quality of nursing care in psychiatric hospitals.

Subjects and Method:

Research Design:

Descriptive correlation research design was used in this study.

Research questions:

Q1: Is there a relation between psychological distress of nurses and quality of nursing care in psychiatric hospitals?

Q2: Is there a relation between psychological well-being of nurses and quality of nursing care in psychiatric hospitals?

Setting:

The study was carried out at three hospitals. These hospitals are psychiatric and neurological hospital at Assiut University, Assiut Mental Health Hospital and Sohag Mental Health Hospital.

Subjects:

Subjects of this study included male and female psychiatric nurses at the three previous hospitals.

Sample:

The sample included (200) nurses out of a total (208) nurses. A non-probability convenience sample was used, with eight nurses being excluded from the study because of having less than one year of experience.

Inclusion criteria:

1. Nurses who are currently employed as registered nurses.
2. Nurses who agree to participate in the study.

Exclusion criteria:

Nurses with experience less than one year (8 nurses were excluded).

Tools of data collection:

Four tools were employed to gather data as follows:

Tool (1): demographic data sheet:

The researcher created this tool to gather the information about the personal data. It included (age, gender, marital status, educational level, and years of experience).

Tool (2): General health questionnaire (GHQ-12):

The General health questionnaire GHQ-12 was developed by **Golderberg., (1988).** It was used to assess common mental disorders as depressive, anxiety and somatic disorders, and translated into Arabic by the researcher. The questionnaire includes 12 items, which uses a 4-point Likert-type scale (from 0 to 3) to evaluate the severity of a mental illness over a few weeks. The sum of the scores (from 0 to 36). From 0 (always) to 3 (never) for the positive items and from 3 (always) to 0 (never) for the negative ones. Higher scores indicated poor mental health **(Basson et al., 2021).** Nurses were grouped into three categories based on the following score: normal level (a score less than 15), nurses suffering from moderate distress (15-20), and nurses with severe problems and psychological distress (21-36).

Tool (3): Psychological well-being scale:

Ryff (2010) developed the short version of the psychological well-being scale. It was used to assess psychological well-being and consists of eighteen items. A 7-point Likert-type scale was used to assess the responses, with 1 denoting "strongly disagree" and 7 denoting "strongly agree." Autonomy, environmental mastery, positive relationships, life purpose, personal growth, and self-acceptance were its six subscales. All of the items were combined to provide a score for psychological well-being overall. Greater degrees of psychological well-being are indicated by higher scores **(Khanjani et al., 2014).**

Tool (4): Quality nursing care scale:

The Quality Nursing Care Scale (QNC) is a 5-point Likert-type tool created by **Liu et al., (2021).** The scale included six sub-scales and 38 items. The sub-scales included Physical environment (six items), Precondition (seven items), Staff characteristics (eight items), Task-oriented activities (six items), Human-oriented activities (five items), and Patient outcomes (six items). The answer categories ranged from "strongly agree" (5) to "strongly disagree" (1).

Validity and reliability of tools:

Validity: The tools were translated into Arabic, and content validity was reviewed by five panels of jury experts in the faculty of nursing at Assiut University to test clarity, comprehensiveness, understanding, relevance, applicability, and easiness.

Reliability:

Reliability of the tools was done by the researcher using test-retest methods for measuring internal

consistency. The Cronbach's Alpha coefficient test for the tools is shown in the following table:

Tools	No. of items	Cronbach Alpha Test
General health questionnaire (GHQ-12)	12	0.81
Psychological well-being scale	18	0.88
Quality of nursing care scale (QNC**).**	38	0.96

Pilot study:

Before beginning data collection, a pilot study was conducted on 10% (20) of nurses to assess the tools' feasibility, consistency and to determine the time needed to complete the tools. No changes have been made. So, the sample selected for the pilot study was included in the study sample.

Ethical consideration:

The research proposal was approved by the Faculty of Nursing ethical committee at Assiut University. Ethical code: in 27 November 2023 (N.1120230713). There was no risk to the study subjects during application. The researcher confirmed the confidentiality and privacy of the collected data. Also, the researcher explained the study's goal to the nurses and assured them that they have the right to refuse to participate and/or withdraw from the study at any time. Prior to the study, the researcher received oral consent from nurses.

Procedure and data collection:

- An official letter was granted from the dean of the faculty of nursing at Assiut University, the ethical committee, faculty of nursing at Assuit University directed to the heads of the psychiatric and neurological hospital at Assiut University, Assiut mental health hospital, and Sohag mental health hospital in order to get permission to conduct the study.
- Before starting data collection, the aim of the study was explained to the studied sample.
- Informed oral consent was taken from the nurses, who were reassured about the confidentiality of the obtained information.
- After obtaining permission, the researcher began to introduce herself to the studied sample.
- The investigator was collecting the data two days per week (Sunday and Tuesday) from 10 am to 1 pm. Each interview took 15-20 minutes.
- The actual fieldwork started from the beginning of April to the beginning of July 2024.
- The investigator distributed the general health questionnaire and the psychological well-being scale to the nurses and asked them to fill it out, and then the researcher observed the care of the nurses and filled out the quality nursing care scale.

Statistical analysis:

The data were tested and analyzed using SPSS version 20 for both data entry and analysis (Statistical Package for Social Science). Data was presented as a number, percentage, mean, and standard deviation. Chi-square tests were used to compare qualitative variables. Quantitative variables were correlated by using independent t-test and one-way Anova t-test to predict high levels of dependent variables. When the P value is less than 0.05, it is considered statistically significant.

Results:

Table (1): Distribution Of The Studied Sample According To demographic And Professional Data (n=200)

Demographic data	No	%
Age		
<25 years	20	10.0
25-30 years	**76**	**38.0**
30-35 years	62	31.0
> 40 years	42	21.0
Gender		
Male	65	32.5
Female	**135**	**67.5**
Marital status		
Single	47	23.5
Married	**146**	**73.0**
Divorced	7	3.5
Level of education		
Secondary school of Nursing	**110**	**55.0**
Bachelor of Nursing	40	20.0
Nursing Institute	50	25.0
Years of experience		
1-5 years	**72**	**36.0**
6-10 years	48	24.0
11-15 years	35	17.5
>15 years	45	22.5

Table (2):Distribution of the Studied Sample According To Levels Of (GHQ) (n=200)

General health questionnaire (GHQ-12)	No	%
Normal	122	61.0
Moderate	47	23.5
Severe	31	15.5
Mean ± SD (range)	**13.87±6.02(4-28)**	

Table (3):Correlation Coefficient between psychological distress, Psychological Well-Being, and Quality Nursing Care for the Studied Sample (n=200)

	A1	A2	A3
General health questionnaire (GHQ-12)	1		
Psychological well-being scale	-.770-**	1	
Quality of nursing care scale	-.260-**	.316**	1

**Statistically Significant Correlation at P. value <0.05* ***Statistically significant Correlation at P. value <0.01*

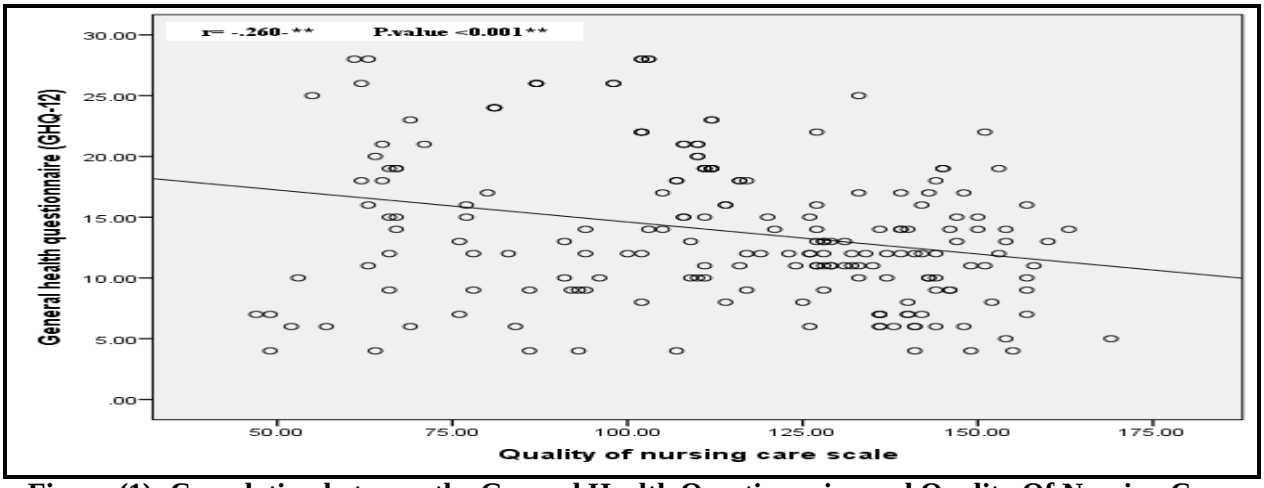

Figure (1): Correlation between the General Health Questionnaire and Quality Of Nursing Care (n=200)

Table (4): Relationship between General Health Questionnaire (GHQ-12) and the nurses' demographic and professional data (n=200)

	General health questionnaire (GHQ-12)							
	Normal (n=122)		Moderate (n=47)		Severe (n=31)		X2	P. value
	No	%	No	%	No	%		
Age								
<25 years	11	9.0	9	19.1	0	0.0	13.61	**0.034***
25-30 years	51	41.8	17	36.2	8	25.8		
30 - 35 years	36	29.5	14	29.8	12	38.7		
> 40 years	24	19.7	7	14.9	11	35.5		
Gender								
Male	42	34.4	20	42.6	3	9.7	9.73	**0.008****
Female	80	65.6	27	57.4	28	90.3		
Marital status								
Single	26	21.3	16	34.0	5	16.1	5.84	**0.211**
Married	91	74.6	29	61.7	26	83.9		
Divorced	5	4.1	2	4.3	0	0.0		
Level of education								
secondary school of Nursing	64	52.5	25	53.2	21	67.7	3.21	**0.522**
Bachelor of Nursing	27	22.1	8	17.0	5	16.1		
Nursing Institute	31	25.4	14	29.8	5	16.1		
Years of experience								
1-5 years	43	35.2	21	44.7	8	25.8	18.92	**0.004****
6-10 years	38	31.1	7	14.9	3	9.7		
11-15 years	14	11.5	12	25.5	9	29.0		
>15 years	27	22.1	7	14.9	11	35.5		

Chi square test for qualitative data **Significant level at P value < 0.05,* ***Significant level at P value < 0.01*

Table (5): Relationship between Quality Nursing Care Scale of the Studied Sample and Their demographic and Professional data(n=200)

	Quality of nursing care scale							
	Low (n=53)		Medium (n=109)		High (n=38)		X2	P. value
	No	%	No	%	No	%		
Age								
<25 years	6	11.3	13	11.9	1	2.6	14.43	0.025*
25-30 years	16	30.2	40	36.7	20	52.6		
30 - 35 years	13	24.5	40	36.7	9	23.7		
> 40 years	18	34.0	16	14.7	8	21.1		
Gender								
Male	19	35.8	31	28.4	15	39.5	1.93	0.381
Female	34	64.2	78	71.6	23	60.5		
Marital status								
Single	12	22.6	27	24.8	8	21.1	1.22	0.875
Married	40	75.5	77	70.6	29	76.3		
Divorced	1	1.9	5	4.6	1	2.6		
Level of education								
Secondary school of Nursing	36	67.9	60	55.0	14	36.8	26.40	0.001**
Bachelor of Nursing	8	15.1	14	12.8	18	47.4		
Nursing Institute	9	17.0	35	32.1	6	15.8		
Years of experience								
1-5 years	17	32.1	36	33.0	19	50.0	13.92	0.031*
6-10 years	8	15.1	30	27.5	10	26.3		
11-15 years	11	20.8	23	21.1	1	2.6		
>15 years	17	32.1	20	18.3	8	21.1		

Chi square test for qualitative data **Significant level at P value < 0.05,* ***Significant level at P value < 0.01*

Table (1): Shows that, 38.0 % of the studied sample aged between 25-30 years old and 67.5% of them are females also, 73.0% of them are married. Concerning educational level, the current study reveals that 55.0% of the studied sample has secondary school of nursing. In addition, 36.0% of them have 1-5 years of experience.

Table (2): Represents that 61.0% of the studied sample have normal mental health, 23.5% of them have moderate distress, and 15.5% of the studied sample have severe psychological distress, with a total mean score of 13.87±6.02.

Table (3): Reveals that there is a highly statistically significant correlation between psychological distress, total psychological well-being, and the total quality of nursing care for nursing staff at $p < 0.001$**.

Figure (1): Illustrates that there is a highly statistically significant negative correlation between the total general health questionnaire and total quality of nursing care for the studied sample at ($r= -.260$**and $p < 0.001$**).

Table (4): Indicates that there is a statistically significant relation between the studied sample's psychological distress and their age, gender, and years of experience at p (0.034*, 0.008**, 0.004**) respectively.

Table (5): Shows that there is a statistically significant relation between the studied sample's total quality of care and their age, level of education, and years of experience at p (0.025*, 0.001**, 0.031*) respectively.

Discussion:

Caring for psychiatric patients can lead to a variety of work-related stressors. These include practice-related stressors, such as increased workloads, frequent workflow, a lack of social support, and inadequate medical facilities, and patient-related stressors, such as repeated exposure to difficulties, violence, death, and suicide, as well as traumatic illness incidents. These factors have a significant impact on the nursing staff's mental health and well-being **(Xie et al., 2020).**

According to the demographic characteristics of the studied nurses, the current study revealed that more than two-thirds of the studied nurses were females. This might be due to the exclusion of males from the nursing profession previously, which leads to a high representation of females in the nursing field. This finding was consistent with **(Afshari et al., 2021)** who reported that less than two-thirds of nurses were females.

Concerning age, the current study showed that more than one-third of nurses were between (25-30) years old. This finding was in the same line with **(Al-Haroon & Al-Qahtani,. 2020)** who reported that less than one-third of nurses were (20-30) years old. While this finding was incongruent with **(Chen et al., 2021)** who reported that less than half of nurses were (31-40) years old.

Concerning marital status, the current study showed that less than three-quarters of studied nurses were married. This finding was consistent with **(Diab et al., 2024)** who found that less than two-thirds were married, and this finding was in confrontation with **(Daba et al., 2024)** who reported that more than half of nurses were single.

According to the level of education, the current study illustrated that more than half of the studied nurses have secondary school of nursing and this finding was in contrast with **(McGinnis., 2022)** who found that more than half of nurses have a bachelor of nursing. This finding might be due to the secondary school of nursing has traditionally been a primary pathway into the profession and could be more feasible than advanced nursing degrees.

As regards years of experience, more than one-third of studied nurses have 1 to 5 years of experience. This might be related to the fact that nurses experience high turnover rates, which lead to a concentration of nurses in the early stages of their profession, and this also may be due to the large number of new graduates entering the workforce. This finding was congruent with **(Sentayehu et al.,2024)** who reported that less than one-third of nurses had 1 to less than 5 years of experience.

According to the general health questionnaire of the studied nurses, the current study revealed that less than two-thirds of nurses have normal mental health. This might be due to positive relationships with peers; nurses may develop effective coping strategies to manage stress, and a sense of purpose from helping others can lead to fulfillment. This finding was different from **(Melnyk et al., 2022)** who reported that almost one half of nurses had worsening mental health.

While less than nearly one-quarter of studied nurses suffer from moderate distress. This might be due to that nurses vary in their ways of managing stress; also, some nurses may not report their psychological distress due to stigma. This finding was similar to **(Holton et al., 2021)** found that approximately one quarter of nurses reported symptoms of psychological distress.

Regarding the correlation between the general health questionnaire and the quality of nursing care, the current study showed that there was a highly statistically significant negative correlation between the total general health questionnaire and the total quality of nursing care, and this means that psychological distress among nurses are related to

low-quality care, while positive low psychological distress is associated with high-quality care.

This might be due to psychological distress which may lead to fatigue, inability to concentrate, and lack of focus and these factors lead to an increased risk of mistakes in patient care; also, mental health problems lead to physical health impacts such as fatigue, headache, and sleep disturbance. All of these factors lead to a negative impact on patient care.

On the opposite side, low psychological distress among nurses enables them to make accurate, quick decisions in critical situations, making them more alert and more productive, so these factors help them to provide high-quality care. This finding was congruent with **(Weigl et al., 2015)** found that there was a negative correlation between stress, burnout, and quality of care.

Pertaining to the correlation between the psychological well-being of nursing staff and their quality of care, the current study revealed that there was a highly statistically significant positive correlation between total psychological well-being and total quality nursing care. This might be due to psychologically healthy nurses having higher emotional resilience, which leads to empathy, patience and results high quality care.

Also, nurses with high psychological well-being can communicate effectively with the patients and collaborate with other colleagues, which is important for effective patient care. This finding was supported by **(Sen & Yildirim.,2023)** who found that there was a positive correlation between the psychological well-being of nurses, their job performance, and the quality of care.

Concerning the relationship between demographic data and psychological distress, the results of the study showed that there was a statistically significant relationship between the studied nursing staff's total psychological distress and their age, gender, and years of experience. The current study showed that there was a highly statistically significant relation between gender and the psychological distress of nurses, where less than two-thirds of female nurses had normal mental health. This might be due to women being more socially conditioned to express emotions and seek support to deal with stress and mental health issues: also, this may be due to the large number of female nurses in the sample. This finding was similar to the study that was reported by **(Opare-Asamoah et al.,2023)** who found that male nurses were noted to be more stressed than female.

In the same context, age, gender, and years of experience affect how nurses deal with the stress and pressure of the work. These factors affect coping strategies, vulnerability to burnout, and resilience, all of which influence mental health. This finding was consistent with **(Kim et al., 2021)** who reported that there was a statistically significant relationship among age and years of experience of nurses and their mental health.

Regarding the relationship between demographic data and quality of nursing care, the current study showed that there was a statistically significant relationship between studied nursing staff quality of care and their age, level of education, and years of experience. This might be due to these factors affecting nurses' skills, knowledge, and competence, where the nurses' age increases nurse's emotional maturity and their ability to deal with stressful situations which leads to high-quality care.

Also, nurses' level of education helps them to understand patient management and nursing practices and increases critical thinking, which improves the quality of care, in addition to more education helping nurses to deal with complex conditions. This finding was consistent with **(Khademi et al.,2021)** who reported that there was a statistically significant relationship between nurses' quality of care, age, and level of education.

Conclusion:

Based on the previous findings, it can be concluded that 23.5% of the studied nurses suffer from moderate distress while 15.5% of them have severe psychological distress, there was a statistically significant correlation between nurses' psychological distress, psychological well-being, and quality of care.

Recommendations:

Based on the results of the current study, the following recommendations are suggested:

- Implementing psycho-educational programs for nurses to improve the quality of care in psychiatric hospitals.
- Implementing stress management program to alleviate stress and improve nurses' psychological well-being in psychiatric settings.
- Further studies are essential to assess factors that could influence the mental health and psychological well-being of nurses at psychiatric hospitals.

Acknowledgements:

The author would like to thank the supervisors for their support and guidance and thank the nursing staff for their participation and cooperation.

References:

- **Afshari, D., Nourollahi-Darabad, M., & Chinisaz, N.. (2021):** Demographic predictors of resilience among nurses during the COVID-19 pandemic. Work, 68(2), 297–303. https://doi.org/10.3233/wor-203376
- **Agussalim Asikin, M., Nasir, M., Podding, I., & Alamsyah R., (2020):** Caring behavior of nurses increase level of client's satisfaction in clinical area. American Journal of Biomedical Science & Research, 10(5), 408- 417.
- https://doi.org/10.34297/AJBSR.2020.10.001544
- **Al-Haroon, H., & Al-Qahtani, M. (2020):** Assessment of Organizational Commitment Among Nurses in a Major Public Hospital in Saudi Arabia. Journal of Multidisciplinary Healthcare, 13, 519–526. https://doi.org/10.2147/JMDH.S256856
- **Arnetz, J., Sudan, S., Goetz, C., Counts, S., & Arnetz, B. (2019):** Nurse work environment and stress biomarkers. Journal of Occupational & Environmental Medicine, 61(8), 676–681.
- **https://doi.org/10.1097/jom.0000000000001642**
- **Anwar, M. M., & Elareed, H. R. (2017):** Burnout Among Egyptian Nurses. Journal of Public Health, 25, 693–697.
- https://doi.org/10.1007/s10389-017-0831- 2.
- **Babapour, A.-R., Gahassab-Mozaffari, N., & Fathnezhad-Kazemi, A.. (2022):** Nurses' job stress and its impact on quality of life and caring behaviors: a cross-sectional study. BMC Nursing, 21(1). **https://doi.org/10.1186/s12912-022-00852-y**
- **Basson, T., Montoya, A., Neily, J., Harmon, L., & Watts, B.V. (2021):** Improving patient safety culture: A report of a multifaceted intervention. Journal of Patient Safety, 17, e1097–e1104.
- **Burhans, L., & Alligood, M. (2020):** Quality nursing care in the words of nurses. Journal of Advanced Nursing, 66(8), 1689–1697. https://doi.org/10.1111/j.1365-2648.2010.05344.x
- **Chen, X., Arber, A., Gao, J., Zhang, L., Ji, M., Wang, D., Wu, J. & Du, J. (2021):** The mental health status among nurses from low-risk areas under normalized COVID-19 pandemic prevention and control in China: A cross-sectional study. Int J Mental Health Nurs, 30: 975-987. https://doi.org/10.1111/inm.12852
- **Diab, G., Naglaa Abdelaziz, M., Ayman Mohamed El-Ashry, Sharif, L., Mahsoon, A., Aljohani, W., & Samia Mohamed, S. (2024):** Unraveling the synergy: How organizational intelligence fuel soft skills and nurses' thriving: A cross-sectional study. BMC Nursing, 23, 1-12. doi: https://doi.org/10.1186/s12912-024-01933-w
- **Daba, L., Beza, L., Kefyalew, M., Teshager, T., Wondimneh, F., Bidiru, A., & Ketema, I. (2024):** Job performance and associated factors among nurses working in adult emergency departments at selected public hospitals in ethiopia: A facility-based cross-sectional study. BMC Nursing, 23, 1-12. doi: https://doi.org/10.1186/s12912-024-01979-w
- **Grobler, C. (2020):** COVID-19: Mental health and clinical equipoise in the face of moral injury. South African Journal of Bioethics and Law, 13, 21-22. **https://doi.org/10.7196/SAJBL.2020.v13i1.00724**
- **Goldberg, D. (1988):** A user's guide to the General Health Questionnaire (GHQ). Windsor, UK: NFER-Nelson. ISBN 0700511822.
- **Hogg, R., Hanley, J., & Smith, P. (2018):** Learning lessons from the analysis of patient complaints relating to staff attitudes, behavior, and communication, using the concept of emotional labor. Journal of Clinical Nursing, 27, e1004-e1012. **https://doi.org/10.**1111/**jocn.14121**
- **Holton, S., Wynter, K., Trueman, M., Bruce, S., Sweeney, S., Crowe, S., Dabscheck, A., Eleftheriou, P., Booth, S., Hitch, D., Said, C. M., Haines, K., & Rasmussen, B. (2021):** Psychological well-being of Australian hospital clinical staff during the COVID-19 pandemic. Australian Health Review, 45(3), 297-305.
- https://doi.org/10.1071/AH20203
- **Khademi, E., Abdi, M., Saeidi, M., Piri, S., & Mohammadian, R. (2021):** Emotional intelligence and quality of nursing care: A need for continuous professional development. *Iranian Journal of Nursing and Midwifery Research*, *26*(4), 361-367.
- https://doi.org/10.4103/ijnmr.IJNMR_268_1940
- **Khanal, P., Devkota, N., Dahal, M., Paudel, K., & Joshi, D. (2020):** Mental health impacts among health workers during COVID-19 in a low resource setting: a cross-sectional survey from Nepal. Globalization Health, 16, 89. doi: 10.1186/s12992-020-00621-z
- **Khanjani, M., Shahidi, S., & Fathabadi, J. (2014):** Factor structure and psychometric properties of the Ryff's scale of Psychological well-being, short form (18-item) among male and female students. Thoughts and Behavior in Clinical Psychology, 9(32), 27-36.
- **https://jtbcp.**riau**.ac.ir/article_67_652c7a0fcd52b8b3f79a9ecdbc18c5d0.pdf?lang=e n**
- **Kim, S., Quiban, C., Sloan, C., & Montejano, A. (2021):** Predictors of poor mental health among nurses during COVID-19 pandemic. Nursing Open, 8(3), 900–907. https://doi.org/10.1002/nop2.697
- **Kinman, G., Teoh, K., & Harriss, A. (**2020**):** The mental health and wellbeing of nurses and midwives in the United Kingdom. Society of Occupational Medicine. Technical Report. Retrieved from **https://eprints.bbk.ac.uk/id/eprint/40551/**

- **Kurniawan, K., Khoirunnisa, K., Afifah, A., Yuliani, L., Andini, A., Subekti, L., & Mulyahati, U. (2021):** Gambaran manajemen stres perawat pada masa pandemi COVID -19: Narrative review. Jurnal Keperawatan Jiwa (JKJ): Persatuan Perawat Nasional Indonesia, 9(3), 665–674. **https://doi.org/10.26714/jkj.9.3.2021.665-674**
- **Liu, Y., Aungsuroch, Y., Gunawan, J., Sha, L., & Shi, T. (2021):** Development and psychometric evaluation of a quality nursing care scale from nurses' perspective. Nursing Open, 8, 1741–1754. **https://doi.org/10.1002/nop2.816**
- **McGinnis, J. (2022):** Socio-demographic characteristics of nurses and their perceptions of shared governance and autonomy on nursing-sensitive indicators among integrated care facilities (Order No. 29392938). Available from ProQuest Dissertations & Theses Global. (2726037051). Retrieved from https://www.proquest.com/dissertations-theses/socio-demographic- characteristics-nurses-their/docview/2726037051/se-2
- **Melnyk, B., Hsieh, A., Tan, A., Teall, A., Weberg, D., Jun, J., Gawlik, K., & Hoying, J. (2022):** Associations among nurses' mental/physical health, lifestyle behaviors, shift length, and workplace wellness support during COVID-19: Important implications for health care systems. Nursing Administration Quarterly, 46(1), 5-18. https://doi.org/10.1097/NAQ.0000000000000499
- **Opare-Asamoah, K., Amuah, J., Dongdem, J., Majeed, S., Mahama, Z., & Zakaria, D. (2023):** The 12-item General Health Questionnaire factorial structure, sociodemographic and work-related factors of Ghanaian nurses and their association with stress: A cross-sectional study. International Journal of Africa Nursing Sciences, 19, 100625. https://doi.org/10.1016/j.ijans.2023.100625
- **Ryff, C., Almeida, D., Ayanian, J. S., Carr, D. S., Cleary, P., Coe, C., Williams, D. (2010):** National Survey of Midlife Development in the United States (MIDUS II), 2004-2006: Documentation of psychosocial constructs and composite variables in MIDUS II Project 1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research
- **Samsualam, S., Agus, A., & Amir, H. (2021):** Nurses' caring behavior in hospital: A literature review. STRADA Jurnal Ilmiah Kesehatan, 10(1), 225–231. https://doi.org/10.30994/sjik.v10i1.607
- **Sen, H. T., & Yildirim, A. (2023):** The relationship between nurses' perceived organizational, supervisor and coworker support, psychological well-being and job performance. JPMA. The Journal of the Pakistan Medical Association, 73(3), 552–557.
- **Sentayehu, A., Taye, M., Heliso, A., Babore, G. O., Birhanu, B., & Awoke, G. (2024):** Professional quality of life and job satisfaction among nurses working at tertiary hospitals in central ethiopia. BMC Nursing, 23, 1-12. doi: https://doi.org/10.1186/s12912-024-02101-w
- **Weigl, M., Schneider, A., Hoffmann, F., & Angerer, P. (2015):** Work stress, burnout, and perceived quality of care: A cross-sectional study among hospital pediatricians. European Journal of Pediatrics, 174(9), 1237–1246. https://doi.org/10.1007/s00431-015-2529-1
- **Woo., Ho, R., Tang, A., & Tam, W. (2020):** Global prevalence of burnout symptoms among nurses: A systematic review and meta-analysis. Journal of Psychiatric Research, 123, 9-20. https://doi.org/10.1016/j.jpsychires.2019.12.015
- **Xie, W., Wang, J., Okoli, C., He, H., Feng, F., Zhuang, L., Tang, P., Zeng, L., & Jin, M. (2020)**: Prevalence and factors of compassion fatigue among Chinese psychiatric nurses: A cross-sectional study. Medicine, 99(29), e21083. https://doi.org/10.1097/MD.0000000000021083