

Work Stress among Nursing Staff and its association to their Organizational Social relations

Sara Mohammed Kotb¹, Safaa Mohamed Abd Elrhman², Faten Ali Ahmed³

1. B.Sc. Nursing,
2. Professor of Nursing Administration,
3. Lecturer of Nursing Administration

Abstract:

Background: Worldwide, work stress among care professionals, nurses in particular, is a major concern in health care systems; it is linked to high rates of job dissatisfaction, burnout, absenteeism, turnover, and stress-related illness, thus placing job performance among nurses' and patients' lives at risk. **Aim of the study:** is to assess Work Stress among Nursing Staff and its association to their Organizational Social relations. **Research design:** a descriptive correlational research design. **Setting:** conducted at the Minia Health Insurance Hospital. **Subjects:** all nursing staff at the time of data collection (no=249). **Data collection tools:** data was collected by using two tools; as self-administered questionnaire consisted of part one socio-demographic data and part two work stress, tool two was organizational socialization. **Results:** the study showed that more than two-thirds of nursing staff have total moderate level of work stress and more than one quarter had high level; also, more than half of nursing staff have high score level of total organizational socialization, and less than half of nursing staff have moderate level score of organizational socialization. **Conclusion:** there was a negative weak association between work stress and organizational social relations among nurses. **Recommendation:** nurses should have training session regarding coping strategies with stress and support each other in their work to decrease their stress.

Key words: Nursing Staff, Work Stress, Organizational Social Relations.

Introduction:

Job stress is an interacting scenario that results from the working environment and the individual employee. It impairs the employee's regular performance and causes changes in their psychological and physiological status. (Unaldi-Baydin, et al., 2020). Stress at work can harm an individual's physical and mental well-being and eventually reduce productivity on the workplace by raising stress levels (Labrague, et al., 2020). According to the World Health Organization, job stress is now a widespread problem that can be expensive in the workplace (Sarafis, et al., 2016).

Moreover, according to the American Institute of Stress, stress is a significant factor in 40% of workplace financial burden and 80% of all occupational injuries. Because of its complicated demands and requirements, nursing is seen as a stressful profession. The primary stressors in the field have been found to be inadequate authority, high expectations, and excessive responsibility. (Babapour, et al., 2022).

In addition, based on data from the International Council of Nurses, it is estimated that work-related stress costs the US economy \$200–300 million a year, and over 90% of medical issues among employees are linked to work-related stress (Hassard, et al., 2018). While stress is acknowledged as a helpful element in contemporary nursing, chronic conditions like hypertension eventually lead to cardiovascular disease, which lowers quality of life (Unaldi-Baydin, et al., 2020).

Coworker conflict, health issues, job dissatisfaction, diminished creativity, decreased professional satisfaction (Shareinia et al., 2018), less accurate and timely decision-making, feelings of inadequacy and depression, exhaustion and disgust from work, decreased energy and work efficiency, lower quality of nursing care, and an impact on relationships and socialisation are all caused by job stress (Rizkianti& Haryani, 2020). Both these things raise the risk of work-related injuries, which have been linked to a number of research' findings indicating that workplace stress affects the

availability of medical care either directly or indirectly (Parveen, et al., 2017)

Consequently, in order to enhance nurses' care quality and behaviors, it is imperative to prevent the psychological and behavioral impacts of stressors that are an inevitable part of the nursing profession. Additionally, healthcare professionals who are able to manage and adjust to work stress are better communicators and have positive relationships with others within their organization (Layali, et al., 2019).

Moreover, the process of organizational socialization (OS) is incorporated into an individual's professional life upon completion of their vocational education. It is during this time that people begin to learn role behaviors that are acceptable for their line of work, develop job-related skills and abilities, and adjust to the norms and values of their organization. People have the option to shift jobs within their organizations or transfer to another one in their professional lives (Yanik& Yildiz, 2019)

Organizational socialization considered to be an important individual resource management function, and this describes the process by which people change their roles inside an organisation from the outside in. During this process, people must discover and absorb the organization's norms and culture in addition to learning how to adjust to new responsibilities (Wolf& Blomberg, 2019). The theory of OS, which is based on social psychology, maintains that the internal and external environmental elements of an organization have a substantial impact on how each individual socializes, and that better outcomes can be obtained by implementing the necessary techniques. (Zheng, et al., 2023).

The definition of organizational social relations is the process of upholding the organizational culture, whereby newly hired employees or those who have changed positions within an organization are taught the knowledge, abilities, attitudes, values, and behaviors that are expected of them in order to succeed. (Cyr, et al., 2023).

In addition, members and the organization are both greatly impacted by social relationships within the organization. The methods that companies use to successfully socialize both new and existing employees are vital since they affect how well individuals adapt and integrate into the workforce. Employees will perform well and be happy at work if the socialization process is effective. During the socialization process, employees pick up information about the group they are a part of and the tasks they must complete to succeed in addition to the policies, language, goals, values, and regulations of the company. (Liao, et al., 2022).

Because of COVID-19, a lot of front-line workers are currently experiencing extremely high levels of stress and anxiety at work (Santarone, et al., 2020). High levels of stress are experienced by hospital front-line doctors and nurses due to a variety of factors, including irregular work schedules, long work hours, fear of infection from close contact with patients, the potential for virus transmission to family members, a lack of a reliable vaccine, and access to medical care (Wu, et al., 2020). Increased labour turnover might be a result of employees' reduced social interactions and organizational commitment as a result of higher job stress (Abdul-rahman, et al., 2020).

Significance of the study:

Nursing is described as a stressful-profession and nurses are exposed to a great number of stressors in their working environment. The work conditions in nursing imply the exposure to pain and death, interpersonal conflicts, lack of autonomy, authority for decision making, the lack of definition of the professional role, which produce a state of chronic stress which lead to decrease work socialization for staff nurse (Viotti & Converso, 2016).

Through my work in the Health Insurance Hospital, it was found that most nurses have work stress and begin to increase during the last period because of COVID-19 and this lead to fear of infection or death, depressed, increase absenteeism, which effect on their immune system, general well-being, decrease their work socialization and increase their turnover. There were little previous studies which linked those two interrelated variables together; so, the researcher introducing this study to assess nursing staff works stress and its relation to their work social relations.

There are little studies about the relation between the work stress and organizational social relations. Said and El-shafei (2020) concluded that three quarters of nurses (75%) in Zigzag general hospital had high stress level versus 60.5% in Zigzag Fever hospital. Also, Ojekou and Dorothy (2015) revealed that level of stress was higher among the staff nurses who had worked for only between 0 and 3 years, with mean stress score 46.0000. Consequently, depending on the findings recommendations will be made that may guide for future implementation of program to improve work socialization and decrease stress.

Aim of the study

The aim of the this study is to investigate Work Stress among Nursing Staff and its association to their Organizational Social relations

Research questions

1. What is the level of work stress among nursing staff?
2. What is the level of organizational social relations among nursing staff?

3. Is there a relation between work stress and work social relations among nursing staff?

SUBJECT and METHODS

Research design

A descriptive correlational research design was used to achieve the aim of current Study.

Setting

The study was conducted at the Minia Health Insurance Hospital.

Subjects

Convenience sample was used and included all nursing staff of Minia Health Insurance Hospital at the time of data collection; the total number of subjects was (249).

Data collection tools

Data was collected by using two tools as following

Tool (I): Self- Administered questionnaire: It will be included two parts:

Part 1: Socio demographic data: It will be used to collect data about nursing staff and encompass items such as age, sex, education level, marital status, position, department, years of experience, and residence.

Part 2: Work stress scale:

This tool was be developed by researchers based on the literatures as: Jackson et al., (1993); Cousins et al., (2004); Sanne et al., (2005); Lambert et al., (2006) to assess work stress among nursing staff. It consisted from (56) items and divided into eight dimensions as follows; Nature of work (5 items), Role management (3 items), Work relationship (8 items), Career development (3 items), Time stress (7 items), Family work conflict (4 items), Work related anxiety (6 items), and COVID -19 stress (20 items). The items was measured by using a five points likert scale ranged as (Always =5, Often = 4, Sometime =3 Seldom =2, Never =1). The scoring system was ranged from 56 to 280 and divided into three levels as follow:

- Low degree of work stress if the score was range from 56 to 130
- Moderate degree of work stress if the score was range from 131 to 205
- High degree of work stress from if the score was range from 206 to 280

Tool (II): Organizational social relations questionnaire

This tool developed by Taormina, (2004) to assess Organizational social relations among nurses. It consisted of 20 items; and it divided into four dimensions as follow: Training (5 items); Understanding (5 items); Co-worker support (5 items) and Future Prospects (5 items). The items was measured by using a five points likert scale ranged as: (strongly agree=5, agree= 4, neutral =3 disagree =2, strongly disagree =1). The scoring system was ranged from (20 to 100), and it divided into three levels as follow:

- Low degree of Organizational social relations from 20 to 46.
- Moderate degree of Organizational social relations from 47 to 73.
- High degree of Organizational social relations from 74 to 100.

Validity and Reliability of Tools:

Validity: The tools were tested for the content validity by a jury of 5 experts' in the field of Nursing Administration, and no necessary modifications was done.

Reliability: The tools were tested for internal reliability by using Cronbach' alpha test and it was (0.899) for tool (I), and (0.914) for tool (II).

Pilot Study:

A pilot study was carried out before starting data collection on 10% of nursing staff (25 nursing staff) from Minia Health Insurance hospital. The aim of this pilot study was to test the clarity, comprehensiveness, accessibility, and applicability of the tools and to estimate the appropriate time require filling the questionnaire and it was about 20 to 30 minutes for the tools.

Ethical Consideration:

An official letter was granted from the Research Ethics Committee of the Faculty of Nursing, Minia University. Approval to conduct the study was obtained from Dean of the Faculty of Nursing, Minia University. A permission and consent was obtained from director of Minia

Health Insurance Hospital, and nursing director of Minia Health Insurance Hospital.

Before the conduction of the pilot study as well as the actual study, agreements were obtained from the participants that are willing to participate in the study, after explaining the nature and purpose of the study. Study subject has the right to refuse to participate or withdraw from the study without any rational any time.

Study subject privacy was considered during collection of data. Participants was assured that all their data are highly confidential; anonymity was also assured through assigning a number for each nurse instead of names to protect their privacy.

Data collection procedure

An official letter was granted from the dean of faculty of nursing. This letter included a brief explanation of the objectives of the study and introduced to the directors of Minia Health Insurance Hospital. Nursing staff were interviewed on group basis to explain the nature and purpose of the study according to their departments and time of work allowed. The data were collected during period of three months as from beginning of October to end of December 2021.

Results

Table (1): Percentage distribution of nursing staff socio- demographic data at Minia Health Insurance Hospital (no=249).

| Personal data | Nursing Staff (no.=249) | |
|-------------------------------|-------------------------|-------|
| | no. | % |
| Age | | |
| ▪ 20-<30 years | 119 | 47.8 |
| ▪ 31-<40years | 80 | 32.1 |
| ▪ >40 years | 50 | 20.1 |
| Mean ± SD | 30.84±8.243 | |
| Marital statuses | | |
| ▪ Single | 46 | 18.5 |
| ▪ Married | 185 | 74.3 |
| ▪ Divorce | 8 | 3.2 |
| ▪ Widowed | 10 | 4.0 |
| Last certificate | | |
| ▪ Diploma degree of nursing | 46 | 18.5 |
| ▪ Technical degree of nursing | 166 | 66.7 |
| ▪ Bachelor degree of nursing | 37 | 14.8 |
| Gender | | |
| ▪ Male | 45 | 18.1% |
| ▪ Female | 204 | 81.9 |
| Residence | | |
| ▪ Urban | 120 | 48.2% |
| ▪ Rural | 129 | 51.8% |
| Years of experiences | | |
| ▪ 1 to <10 | 175 | 70.3% |
| ▪ 10 to <20 | 48 | 19.3% |
| ▪ 20 to <30 | 22 | 8.8% |
| ▪ ≥ 30 | 4 | 1.6% |

Table (1) presents that there are (47.8%) of staff nurses aged between 20 - < 30 with mean age 30.84±8.243 years; and there are (74.3%) of them married. Regarding last certificate, there are (66.7%) of nursing staff have Nursing Technician degree. Concerning the gender, there are (81.9%) of the nursing staff females and (18.1 %) of them are males. As regards to residence, there are (51.8%) of nursing staff living in rural area and (48.2%) of them living in urban area. Speaking about years of experiences, there are (70.3%) of them have one to less than ten years.

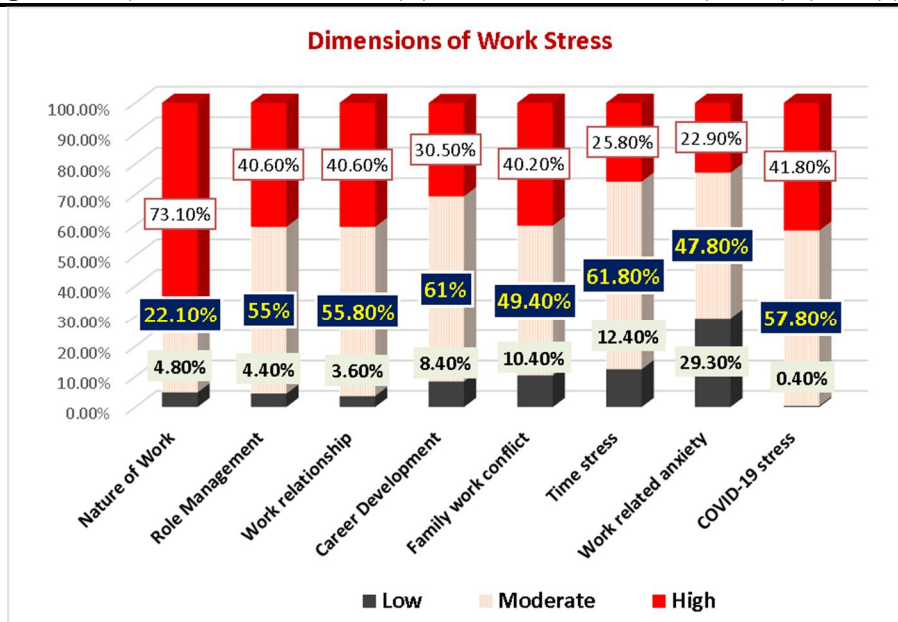


Figure (1): Percentage distribution of work stress dimensions among nursing staff at Minia Health Insurance Hospital (no=249).

Figure (1) shows that (73.1%) of nursing staff have high level of nature of work dimension and only (4.8) have low level of nature of work dimension. While there are (61.8%, 61%, 57.8%, 55%, 55%, 49.4%, 47.8%) of nursing staff have moderate level of (time stress, career development, covid-19 stress, role management, work relationship, family work conflict, and work related anxiety dimensions respectively).

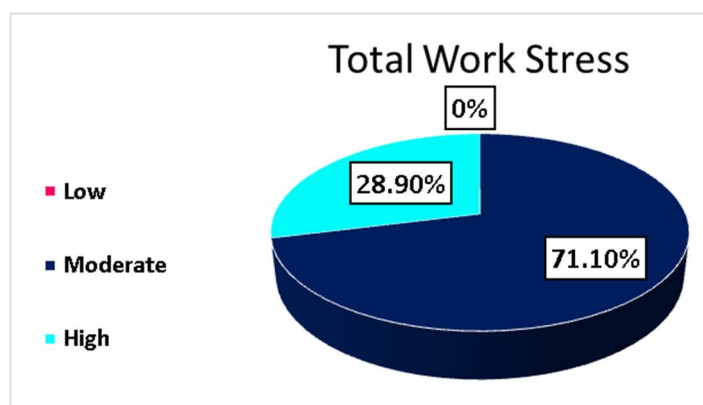


Figure (2): Percentage distribution of total work stress among nursing staff at Minia Health Insurance Hospital (no=249).

Figure (2) shows that (71.1%) of nursing staff have moderate level of total work stress score, while (28.9%) have high level of total work stress.

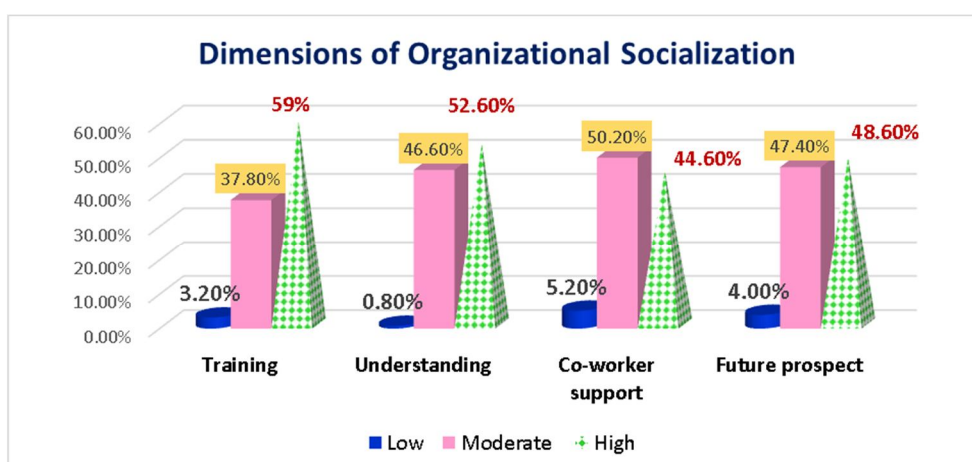


Figure (3): Percentage distribution of organizational socialization dimensions among nursing staff at Minia Health Insurance Hospital (no=249).

Figure (3) displays that there are (59%, 52.6%, and 48.6%) of nursing staff have high level of (training, understanding, and future prospect dimensions respectively). While, there are (50.2%) of nursing staff have moderate level of co-worker support dimension.

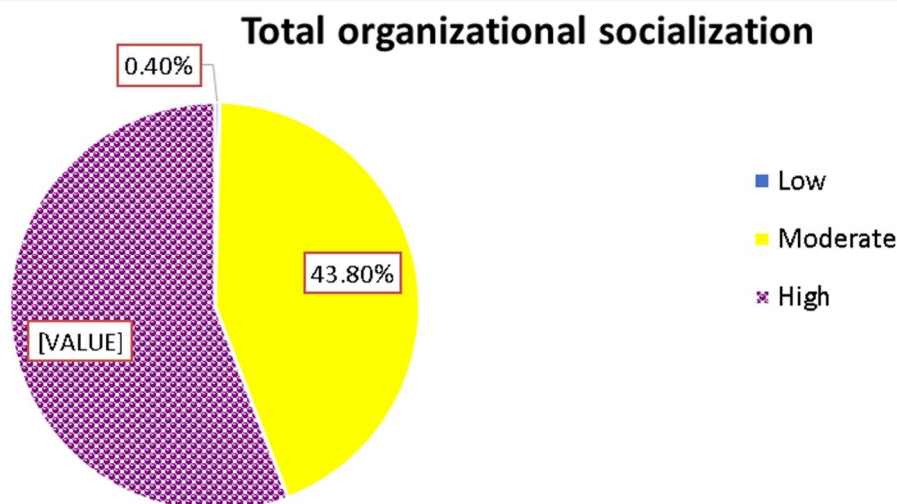


Figure (4): Percentage distribution of total organizational socialization among nursing staff at Minia Health Insurance Hospital (no=249).

Figure (4) displays that (55.80%) of nursing staff have high score level of total organizational socialization, and (43.8%) of nursing staff have moderate level score; while only (0.40%) of nursing staff low level score of total organizational socialization.

Table (2): Correlation between study variables among nursing staff at Minia Health Insurance Hospital (no=249).

| Variable | Work stress | | Organizational socialization | |
|------------------------------|-------------|-------|------------------------------|-------|
| | r | P | r | P |
| Work stress | - | - | -.262** | 0.001 |
| Organizational socialization | -.262** | 0.001 | - | - |

**Correlation is significant at the 0.01 level (2-tailed). * p<0.05 (significant) **p<0.05 (highly significant),PCC: P – value based on Pearson correlation coefficient

Table (2) displays that there is negative weak association between organizational socialization and work stress (r= -0.262, P < 0.001).

Discussion

Globally, work-related stress had a significant impact on health-care providers. Private and public health-care institutions are considered intensive work areas for work-related stress. (Tsegaw, et al., 2022). Nurses faced with severe illness and the death of patients that makes nursing as highly stressful profession. It promotes organizational incompetency, high staff turnover, sickness, absenteeism, decrease quality of care, increased costs of health care, and reduced job satisfaction (Ezenwaji, et al., 2019).

Work-related stress had negative impacts on individuals and organizations. Job dissatisfaction, lower motivation, insomnia, psychological distress, depression, anxiousness, aggressiveness, loss of self-confidence, loss of concentration, cardiovascular diseases, high cholesterol, and high blood glucose level are consequences at individuals whereas increasing organizational cost and failure to meet organizational goals were reported at the organization level. Furthermore, stress enhances the cost for health care and reduces job satisfaction. Additionally, absenteeism and turnover among the staffs reduces the quality of health care and client satisfaction (Anand& Mejid, 2018& Bruno, 2019).

Moreover, no one is an island. Employee need the company of others and honest workplace relationships to function, be satisfied and achieve better results. Also, building genuine and lasting workplace relationships is beneficial in many ways - it leads to better teamwork, less conflict, more job satisfaction, less burnout, less turnover, and less feeling of work stress. The importance of work stress on newcomers' organizational socialization has been a topic of substantial interest. However, the impact mechanism of different stressors

on newcomers' organizational socialization is still in the early stages of theory development (Tang, et al., 2022).

Regarding demographic data:

The current study presented that there were near to half of staff nurses aged between 20 - < 30 with mean age 30.84±8.243 years; and there were near to three-quarters of them married. Regarding last certificate, there were two-thirds of nursing staff had Nursing Technician degree. Concerning the gender, the majority of the nursing staff are females and minority of them are males. As regards to residence, there were more than half of nursing staff living in rural area. Speaking about years of experiences, there were less than three-quarters of them had one to less than ten years.

Regarding Work stress

The current study showed that near to three-quarters of nursing staff had high level of nature of work dimension. While the highest percentage of nursing staff had moderate level of (time stress, career development, covid-19 stress, role management, work relationship, family work conflict, and work related anxiety dimensions of work stress. This could be due to the heavy work the nursing staff have in their work and nature of work was the most one affect nurses feeling of stress and this could be due to the time of data collection was during covid-19 pandemic and there was shortage of nurses and more absenteeism among nurses which make work is very loaded on nurses.

This is consistent with Mo et al. (2020) who reported that the unfolding emergency caused by the COVID-19, the ever-increasing number of confirmed and suspected cases, and heavy workload are putting nursing services under intense pressure.

Furthermore, **Neto et al. (2020)** reported that there are significant stressors for those nurses are linked to their psychological working environment including dealing with death and dying, inadequate emotional preparation, and uncertainty concerning treatment. This could be explained by the following facts: nurses, not a relative, are inevitably the last people a dying COVID-19 patient will see, and this put them under great stress.

Also, this is consistent with **Hassan et al. (2020)** who reported that dealing with angry/blaming relatives and distressed patients, patients/relatives' expectations of care that cannot be met were important stressors for all healthcare personnel.

These results are congruent with **Said and El-shafei (2021)** who revealed in their study about "Occupational stress, job satisfaction, and intent to leave: nurses working on front lines during COVID-19 pandemic" that higher numbers of participants reported high stress level; especially in subscales of workload, dealing with the death and dying, inadequate emotional preparation, problems relating to supervisors, and uncertainty concerning treatment, patients, and their families; as well as participants reported high specific COVID-19-associated stress level.

Furthermore the current study showed **regarding total score of work stress** that the highest percentage as seventy one percent of nursing staff had moderate level of total work stress score, and more than one-quarter had high level of total work stress. This result indicated that nurses face with moderate to high degree of work stress which may be due to work heavy load, working with covid-19 patients and seeing patients' dies, the conflict in the work they have, and pressure of time to provide high quality of nursing care in a place have shortage of resources and staff.

This result is congruent with **Keykaleh et al. (2018)** who displayed that the majority of nurses in their study experienced a moderate level of stress. Also, **Almazan et al. (2019)** agreed that nurses reported moderate level of stress in their workplace due to workload. In addition, **Alqahtani (2019)** mentioned in her study among nurses that they had medium to high level of workplace stress, as excessive workload of nursing professionals, complexity of patient care activities, poor organized work environments, and lack of leaders' support are considered as contributing factor to the job stress which has resulted in providing unsafe care

This finding is in line with **Hoedi, et al., (2021)** who mentioned that most of the nurses experienced a moderate level of stress. And they identified a statistically significant association between increased numbers of working hours per week and the nurses' perceived stress level.

Regarding the organizational social relations

The study showed that the highest percentage of nursing staff had high level of training and understanding dimensions. Also, the highest percentage of nursing staff had moderate level of co-worker support dimension and near to half had high level. For the future prospect dimension, there was about half of nursing staff had moderate level and about half had high level. These results showed that staff nursing in Health Insurance Hospital at Minia city had good organizational socialization for all dimensions, they receiving good training and understanding from their supervisors. Also they receive social support from their peers and know well the future in their work

These results come in line with **Calderón-Mafud, et al., (2015)** who had a study about "Model of Leadership, Socialization and Work Engagement. Own Elaboration" and mentioned that participants agreed that training and understanding dimensions were in moderate and good degree. They displayed that training, emotional support and the functional understanding that a worker gets his companions acts to enable it to deal with the organizational changes that forced him to clarify their role constantly

Moreover, these results are in same context with **Calderon-Mafud and Pando-Moreno (2018)** who displayed in their study about organizational socialization that the study subjected agreed with good level regarding the future and co-worker support of organizational socialization dimensions. Also, they mentioned that the relations of mutual support and the support received from colleagues during the socialization, facilitates the creation of commitment to the organization.

Moreover, the current study displayed that more than half of nursing staff had high score level of **total organizational socialization**, and forty three of nursing staff had moderate level score; while only less than one percent of them had low level score of total organizational socialization. This result could be due to the good relations found between nurses each other's, as well as the good relation nursing staff have with their supervisors.

This result come in line with **Woodrow and Guest (2020)** who indicated in their study that participants had good organizational socialization. Also, **Deng, et al., (2021)** in their study about "Curvilinear Effects of Extraversion on Socialization Outcomes among Chinese College Students" found that students had moderate to good level of socialization.

Also, this is in line with **Lee and Jacobs (2023)** who mentioned in their study entitled "Relationships among supervisors' socialization behaviors, newcomers' socialization outcomes, organizational commitment, and work outcomes" that newcomers have moderate to good supervisors' socialization.

Regarding correlation between work stress and organizational social relations:

The current study revealed that there was a negative weak association between organizational socialization and work stress ($r = -0.262$, $P < 0.001$). This mean that when nurses had more work stress their relations in organization is affected and decreased. Also, this result indicated that nursing staff should have more organizational socialization and positive work relations to help them cope with work stress.

This result is matched with **Harste (2016)** who had a study about "Socializing to recover from work stress: the benefits of acting extraverted" and mentioned that socializing could be used as a strategy to recovery from work stress. The findings indicate that while the amount of time spent socializing outside of work or the positivity of the conversation, it can predict a positive affect which can enhance mood and recovery from stress.

Also, this result is in line with **Frogeli, et al., (2022)** who mentioned from their results that on weeks when participants experienced higher role clarity, task mastery, and social acceptance, they reported significantly less stress, and that participants who experienced higher levels of the resources in general, reported significantly less strain.

Conclusion:

It can be concluded from current study that regarding total score of work stress the highest percentage as of nursing staff had moderate level of total work stress score, and more than one-quarter had high level of total work stress. Moreover, the current study displayed that more than half of nursing staff had high score level of total organizational socialization, and forty three of nursing staff had moderate level score; while only less than one percent of them had low level score of total organizational socialization. Also, it was noted from the findings of current study that there was a negative weak association between organizational socialization and work stress

Recommendation

- Provide training program about coping strategies with work stress for nurses.
- Facilitate the utilization of all requirements and enough resources at all times for nurses, especially those working in isolation department, and there should be training sessions provided on COVID-19 protection.
- Provide opportunities for nurses to have good relations with each other in their workplace in order to help each other deal with work stress.
- Allow nurses to have the chance to talk about their stress, support one another, and offer proposals for changes to the workplace.

References

1. Almazan JU, Albougami AS, Alamri MS (2019) Exploring nurses' work-related stress in an acute care hospital in KSA. *J Taibah Univ Med Sci* 14(4):376–382. <https://doi.org/10.1016/j.jtumed.2019.04.006>
2. Alqahtani, I. (2019). Workplace Stress among Nurses. *International Journal of Innovative Research in Medical Science*. 4. 10.23958/ijirms/vol04-i12/802.
3. Anand S, Mejid A. (2018). Prevalence and associated factors of work related stress among nurses working in worabe comprehensive and specialized hospital, south west Ethiopia. *Prevalence*. 2018;3(3):260–266. [Google Scholar]
4. Babapour, AR., 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 Nurs* 21, 75 (2022). <https://doi.org/10.1186/s12912-022-00852-y>
5. Bruno L. (2019). Sources and effects of stress on work performance, and coping strategies among nurses at University of Cape Coast Hospital, Cape Coast, Ghana. *J Chem Inf Model*. 2019;53(9):1689–1699.
6. Calderón Mafud, J. L., Laca Arocena, F. A., Pando-Moreno, M., & Pedroza, F. (2015). Relationship between Mexican Workers' Organizational Socialization and Commitment. *Psicogente*, 18, 267-277.
7. Calderon-Mafud, J.L. & Pando-Moreno, M. (2018). Role of Authentic Leadership in Organizational Socialization and Work Engagement among Workers. *Psychology*, 9, 46-62. doi: 10.4236/psych.2018.91004.
8. Cyr, A.-A., Le Breton-Miller, I., & Miller, D. (2023). Organizational Social Relations and Social Embedding: A Pluralistic Review. *Journal of Management*, 49(1), 474-508. <https://doi.org/10.1177/01492063221117120>
9. Deng Y., Chen H., Yao X. (2021). Curvilinear Effects of Extraversion on Socialization Outcomes Among Chinese College Students. *Frontiers in Psychology*; 12(2021). URL=<https://www.frontiersin.org/articles/10.3389/fpsyg.2021.652834>.doi=10.3389/fpsyg.2021.652834

10. Ezenwaji IO, Eseadi C, Okide CC, et al. (2019). Work-related stress, burnout, and related sociodemographic factors among nurses: implications for administrators, research, and policy. *Medicine*. 2019;98:3. [PMC free article] [PubMed] [Google Scholar]
11. Frögéli, Elin & Annell, Stefan & Rudman, Ann & Inzunza, Miguel & Gustavsson, Petter. (2022). The Importance of Effective Organizational Socialization for Preventing Stress, Strain, and Early Career Burnout: An Intensive Longitudinal Study of New Professionals. *International journal of environmental research and public health*. 19. 10.3390/ijerph19127356.
12. Harste, R., (2016). Socializing to recover from work stress: the benefits of acting extraverted". Masters Theses. Faculty of the University of Tennessee at Chattanooga. <https://scholar.utc.edu/theses/454>
13. Hassan NM, Abu-Elenin MM, Elsallamy RM, Kabbash IA. (2020). Job stress among resident physicians in Tanta University Hospitals, Egypt. *Environ Sci Pollut Res*. 2020;27:37557–37564. doi: 10.1007/s11356-020-08271-9.
14. Hassard J, Teoh KR, Visockaite G, Dewe P, Cox T. (2018). The cost of work-related stress to society: A systematic review. *J Occup Health Psychol*. 2018;23(1):1.
15. Hoedl, M., Bauer, S. & Eglseer, D. (2021). Influence of nursing staff working hours on stress levels during the COVID-19 pandemic. *HBScience* 12, 92–98 (2021). <https://doi.org/10.1007/s16024-021-00354-y>
16. Keykaleh MS, Safarpour H, Yousefian S, Faghisolouk F, Mohammadi E, Ghomian Z (2018) The relationship between nurse's job stress and patient safety. *Open Access Maced J Med Sci* 6(11):2228. <https://doi.org/10.3889/oamjms.2018.351>
17. Labrague LJ, Nwafor CE, Tsaras K. (2020). Influence of toxic and transformational leadership practices on nurses' job satisfaction, job stress, absenteeism and turnover intention: A cross-sectional study. *J Nurs Manag*. 2020;28(5):1104–13.
18. Layali I, Ghajar M, Abedini E, Emadian SO, joulaei M. (2019). Role of Job Stressors on Quality of Life in Nurses. *J Mazandaran Univ Med Sci*. 2019;29(180):129–33.
19. Lee, A.S. & Jacobs, R.L. (2023). Relationships among supervisors' socialization behaviors, newcomers' socialization outcomes, organizational commitment, and work outcomes. *European Journal of Training and Development*. <https://www.emerald.com/insight/2046-9012.htm>
20. Liao, G., Zhou, J., & Yin, J. (2022). Effect of Organizational Socialization of New Employees on Team Innovation Performance: A Cross-Level Model. *Psychology research and behavior management*, 15, 1017–1031. <https://doi.org/10.2147/PRBM.S359773>.
21. Mo Y, Deng L, Zhang L, Lang Q, Liao C, Wang N, Qin M, Huang H. (2020). Work stress among Chinese nurses to support Wuhan for fighting against the COVID-19 epidemic. *J Nurs Manag*. 2020;28:1002–1009. doi: 10.1111/jonm.13014.
22. Neto M, Almeida HG, Esmeraldo JD, Nobre CB, Pinheiro WR, de Oliveira C, Sousa I, Lima O, Lima N, Moreira MM, Lima C, Júnior JG, da Silva C. (2020). When health professionals look death in the eye: the mental health of professionals who deal daily with the 2019 coronavirus outbreak. *Psychiatry Res*. 2020;288:112972. doi: 10.1016/j.psychres.2020.112972.
23. Parveen R, Hussain M, Afzal M, Parveen MK, Majeed MI, Tahira F, Sabir M. (2017). The impact of occupational stress on nurses caring behavior and their health related quality of life. *Saudi J Med Pharm Sci*. 2017;3(9):1016–25.
24. Rizkianti I, Haryani A. (2020). The Relationship Between Workload and Work Stress With Caring Behavior Of Nurses in Inpatient Rooms. *Jurnal Aisyah: Jurnal Ilmu Kesehatan*. 2020;5(2):159–66.

25. Said, R. M., & El-Shafei, D. A. (2021). Occupational stress, job satisfaction, and intent to leave: nurses working on front lines during COVID-19 pandemic in Zagazig City, Egypt. *Environmental science and pollution research international*, 28(7), 8791–8801. <https://doi.org/10.1007/s11356-020-11235-8>
26. Sarafis P, Rousaki E, Tsounis A, Malliarou M, Lahana L, Bamidis P, Niakas D, Papastavrou E. (2016). The impact of occupational stress on nurses' caring behaviors and their health related quality of life. *BMC Nurs*. 2016;15(1):1–9.
27. Shareinia H, Khuniki F, Bloochi Beydokhti T. Comparison between job stress among emergency department nurses with nurses of other departments. *Q J Nurs Manag*. 2018;6(3):48–56.
28. Tsegaw, S., Getachew, Y., & Tegegne, B. (2022). Determinants of Work-Related Stress Among Nurses Working in Private and Public Hospitals in Dessie City, 2021: Comparative Cross-Sectional Study. *Psychology research and behavior management*, 15, 1823–1835. <https://doi.org/10.2147/PRBM.S372882>
29. Unaldi Baydin N, Tiryaki Sen H, Kartoglu Gurler S, Dalli B, Harmanci Seren AK. (2020). A study on the relationship between nurses' compulsory citizenship behaviours and job stress. *J Nurs Manag*. 2020 May;28(4):851-859. doi: 10.1111/jonm.13009. Epub 2020 Apr 20. PMID: 32187768.
30. Wolf, C.T.& Blomberg, J.L. (2019). *Intelligent Systems in Everyday Work Practices: Integrations and Sociotechnical Calibrations*. Springer International Publishing, Cham (2019), pp. 546-550
31. Woodrow, C. and Guest, D.E. (2020), "Pathways through organizational socialization: a longitudinal qualitative study based on the psychological contract", *Journal of Occupational and Organizational Psychology*, Vol. 93 No. 1, pp. 110-133.
32. Yanik, A. & Yildiz, C. (2019). The Organizational Socialization Perceptions of the Healthcare Managers and the Effect of Demographic – Career Variables *International Journal of Caring Sciences*; 12(3):1439
33. Zheng, Q., Gou, J., Camarinha-Matos, L.M., Zhang, J.Z., Zhang, X. (2023). Digital capability requirements and improvement strategies: Organizational socialization of AI teammates. *Information Processing & Management*; 60(6):2-12.