

### **Social Science Journal**

### Influence of work shift on Psychological and Social states among Nurses

By

#### Ali Abdul Lateef Fadil

Community Health Nursing Department, College of Nursing, University of Baghdad, Iraq Email: ali.abdullateef1206b@conursing.uobaghdad.edu.iq

#### Raad Kareem Faraj

Community Health Nursing Department, College of Nursing, University of Baghdad, Iraq Email: dr.raad@conursing.uobaghdad.edu.iq

### Abstract

The study aims to Assess the Influence of work shifts on Psychological and Social states among Nurses. A descriptive-analytic design, which is using the evaluation approach, had been conducted in Teaching Hospitals in Baghdad City in order to measure the Influence of work shifts on Psychological and Social states among Nurses. The finding showed that nurses are associated with a moderate level of psychological and social problems (47.43±5.791). This study recommended the Ministry of Health should initiate incentives for nurses who are working during night and evening shifts to encourage them and decrease their problems, the Ministry of Health should provide a special recreational and rehabilitative program for those nurses working during night and evening shift to improve their mental health and reduces psychological program.

**Keyword**: Influence; work shift; Psychological; Social states; Nurses.

### Introduction

Work shift is an inconsistent and atypical work schedule, compared to the typical daytime work schedule, it refers to work schedules outside of usual daytime hours and includes evening, night, morning, rotating, and irregular shift schedules (Wang et al., 2011).

Several studies have demonstrated various adverse effects of unusual working hours, regarding the deleterious effects of work shifts on essential brain functions, most of the studies have investigated its consequences on cognitive functions (Keck Lund and Axels son, 2016)

However, only a few research studies have investigated the effect of work Shifts on Executive functions which are a set of general-purpose controlling mechanisms associated with the prefrontal lobe, which control the dynamics of human actions and cognition (Niu et al., 2015; Wood, 2021).

Impairments in Executive Functions disturb everyday life performance by decreasing the ability to adjust to environmental demands, it is also associated with long-term vocational and psychosocial disturbances and a decreased quality of life, additionally, since Executive Functions and cognitive functions – processes involved with input, storage, processing, and output of information- work concomitantly, an impairment in Executive Functions can disturb cognition (Athar et al., 2020; Wynn, 2021; Yang, 2021).

charge with public health and providing health care definition of "work shift" is to carry out the work important. On the other hand, dissatisfied employees are beyond the standard

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working hours (before 7 a.m. and after 6 p.m.). Nowadays, it was considered that a risk factor might have unwanted effects on different aspects of one's life. Different social, service, and economic systems impose work shifts on their employees. Among them, the nursing system is notable, and the nurses are usually forced to work in rotating shifts. Health and treatment organizations are in service. Therefore, the service and its quality are not expected to provide high-quality services and poor quality of health services, in turn, leads to dissatisfaction among the patients. In addition, professions like nursing, medicine, and health care are somehow performed in hospital environments and need to be scheduled in rotating shifts. People in these professions have to work overnight and spend long hours in hospitals. Different work shifts such as overnight shifts and over works might lead to job dissatisfaction (Nazarpour et al., 2008).

### Methodology

*The Design of the Study*: A descriptive-analytic design, which is using the evaluation approach, had been conducted in Teaching Hospitals in Baghdad City in order to measure the Influence of work shifts on Psychological and Social states among Nurses.

Administrative and Ethical Arrangements: After getting approved by the College of Nursing Council/the University of Baghdad, the researcher provided a detailed description of the objectives and project of the study to the Ministry of Planning, Central Statistical Organization approved the study instrument.

The setting of the Study: The study was conducted at teaching hospital in Baghdad city Study Samples: A Sample of (249) nurses were selected including male and female nurses who worked in morning, evening, and night shifts. A Convenience sample "non-probability" sample of nurses had been selected from teaching hospital distribution in Baghdad city

#### **Instrument Construction**

**Part I:** The first part of the questionnaire includes (8) item relative to the Demographic data of the nurses who working in the morning, evening and night shift which include age, gender, education level, work shift, the marital status, the number of your experience, monthly salary and breaks interval.

**Part II:** This part consists of (14) Items related to assess the Influence of work shift on Psychological and Social states among Nurses.

#### Methods of Data Collection

The data was collected throughout the utilization of the report questionnaire 'Arabic version' and as a means for data collection (December 12th, 2021, to February 12th, 2022), and through the structure of interviews with nurses. The method of choosing the answer to the parts of the questionnaire was explained and placing one answer in the space provided, and that it was neglected for more than one answer, the questionnaire by structured interview. The use of the questionnaire takes about (20-40) minutes.

#### Statistical Data analysis approach

Statistical analyses were conducted by using the statistical package for social science (IBM SPSS Statistics) version 26.0. Data analysis was employed through the application of descriptive and inferential statistical approaches to achieve the objectives of the study.



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Results

**Table** (1): *Distribution of Nurses according to their Socio-demographic Characteristics* 

List	Characteristics			%
	Age M±SD= 31.19±8.683	Less than 20 years	2	.8
1		20 – less than 30 years	124	49.9
		30 - less than 40 years		31.7
		40 - less than 50 years	31	12.4
		50 ≤ year	13	5.2
		Total	249	100
2	Gender	Male	115	46.2
		Female	134	53.8
		Total	249	100
	Marital status	Unmarried	49	19.7
		Married	175	70.3
3		Divorced	18	7.2
3		Widowed / er	4	1.6
		Separated	3	1.2
		Total	249	100
	Monthly income	300000 - 600000  IqD	128	51.4
4		601000 – 900000 IqD	73	29.3
		901000 IqD ≤	48	19.3
		Total	249	100

f: Frequency, %: Percentage, M: Mean, SD: Standard deviation

This table shows that average age for nurses is 31.19±8.683 years in which 49.9% of them are with age group of 20-less than 30 years. The gender of nurses refers to 53.8% of them are females and 46.2% of them are males.Regarding marital status, 70.3% of nurses are married and 19.7% of them are still unmarried, 7.2% are divorced.

The monthly inc'ome refers to 300000 to 600000 Iraqi dinars among 51.4% of them.

**Table (2):** *Mean and Standard Deviation for Items related to Psychological and Social Problems among Nurses (N=249)* 

No	Items	Mean	SD	Evaluation
1	The permanence of shifts causes me general fatigue and fatigue.	3.48	1.140	Moderate
2	Family disputes increase after my work on night shifts	3.45	1.088	Moderate
3	My social relationships were influenced by the nature of my work, and I was socially isolated.	3.10	1.220	Moderate
4	I already knew this profession was causing family problems.	3.27	1.202	Moderate
5	I'm upset about my work on public holidays.	3.69	1.083	High
6	I work in nursing for reasons that provide medical assistance to neighbors and relatives outside working hours.	3.58	.935	Moderate
7	The problem with my work is just the shift system.	3.51	1.063	Moderate
8	I'm at work relieved.	3.27	1.337	Moderate
9	The impact of work and patient deaths remains with me outside of work.	3.54	1.092	Moderate
10	My mental state is affected by the suffering I see from patients.	3.65	.912	Moderate
11	I feel nervous when facing difficult medical conditions or special cases.	3.38	1.196	Moderate
12	Dealing with patient escorts makes me nervous.	3.27	.996	Moderate
13	Doctors who specialize in the superiority of nurses deal without showing any interest in their opinions	3.07	1.213	Moderate
14	I'm delusional about diseases similar to the ones I'm taking care of.	3.16	1.062	Moderate
No:	Number, SD: Standard Deviation, Low= 1 – 2.33, Moderate= 2.34	-3.66	, High	h = 3.67 - 5

This table presents the mean scores and standard deviation for items related to psychological and social problems; the findings indicate moderate among all items except *Res Militaris*, vol.12, n°2, Summer-Autumn 2022 3859

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item5 that show high level.

Table (3): Evaluation of Work Shift Consequences related to Psychological and Social

Problems among Nurses

Levels	f	%	M	SD	Eva.	
Low	0	0		5.791		
Moderate	192	77.1	47.43		Madagata	
High	57	22.9			Moderate	
Total	249	100				

f: Frequency, %: Percentage, Eva.: Evaluation, M: Mean for total score, SD: Standard Deviation for total score; Low: 14 – 32.66, Moderate: 32.67 – 51.33, High: 51.34 – 70

This table reveals that 77.1% of nurses are associated with moderate level of psychological and social problems (47.43±5.791).

### **Discussion**

The descriptive analysis of findings for socio-demographic variables in table (1) revealed that average age for nurses is 31.19±8.683 years in which highest percentage of them are with age group of 20-less than 30 years. The gender of nurses refers that nurses are females which are show more than males. Regarding marital status, more of nurses are married and a little of them are still unmarried and divorced. The monthly income refers to 300000 to 600000 Iraqi dinars among more than half of them.

It has seen out of analysis for socio-demographic characteristics of nurses that they are young adult female nurses who were married with previewed moderate monthly income. Interpreting the results obtained for the establishment of a professional profile is always an arduous exercise of approximation and distancing of its constituent elements not always able to be fully, apprehended in a short period of time, for the application of the questionnaire in the data collection. The variable age is an important factor for nurses' activities, since the performance of their daily functions requires a lot of vigor and physical conditioning, which are not infrequently associated with their physical fitness, that is, the capacity to perform activities of the nurse profession. It is possible, therefore, that some behaviors are related to this variable, especially when it comes to resisting and / or overcoming challenges and stress situations. The finding of this study was supported by finding of study that found the nurses are female young and married with approximately moderate level of income (Nunes de Araujo, et al., 2017).

Table (2) presented the mean scores and standard deviation for items related to psychological and social problems; the findings indicate moderate among all items except item5 which shows a high level. The findings infer that nurses develop psychological social problems due to work shifts; these problems occur when the nurses do have not enough time for their families especially, they are obligated to work even on holidays, therefore, their family relationships will be influenced and as result, the nurses may be experiencing distress and stress. A study reported that nurses experience elevated physical and psychological demands at work without external motivators like financial benefits (adequate salary), self-content (respect and support from colleagues and superiors), and opportunities like promotion possibilities, security, etc., means that in general, they suffer poor quality of life. According to this affirmation, the present study showed a high percentage of psychological demands and insecurity in the red area of nursing assistants and nurses, as well as day and work shifts,

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offering a direct reflection on nurses who presented higher levels of tension than nursing assistants and higher insecurity of work shift than day work. Together, these factors may result in depression, fatigue, or a bad mood. On the other hand, active work and development is a positive factor beforehand, which is more presented in nurses and work shifts in this study, along with a raised motivational character but that may turn into an obsession (Leyva-Vela et al., 2018).

The findings in the table (3) revealed that nurses are associated with a moderate level of psychological and social problems (47.43±5.791).

### Conclusion

Nurses are associated with a moderate level of psychological and social problems

#### Recommendation

- 1-The Ministry of Health should initiate incentives for nurses who are working during night and evening shifts to encourage them and decrease their problems.
- 2- The Ministry of Health should provide a special recreational and rehabilitative program for those nurses working during night and evening shift to improve their mental health and reduces psychological program.
- 3-A regular health assessment is required for nurses working night and evening shifts to explore their health status and detection of physical problems related to sleep and eating and so on.

### References

- 1. Wang XS, Armstrong ME, Cairns BJ, Key TJ, Travis RC. (2011). Shift work and chronic disease: the epidemiological evidence. Occupational Medicine (Oxford, England).; 61(2): 78–89. DOI: 10.1093/occmed/kqr001
- 2. Wood, A. N. (2021). The "Dual Sources Account," Predestination, and the Problem of Hell. *European journal for philosophy of religion*, 13(1), 103-127. https://doi.org/10.24204/ejpr.v13i1.3096
- 3. Kecklund G, Axelsson J. (2016) Health consequences of shift work and insufficient sleep. BMJ-British Medical Journal. 355: 13 DOI: 10.1136/bmj. i5210
- 4. Niu S-F, Chung M-H, Chu H, Tsai J-C, Lin C-C, Liao Y-M, et al. Differences in cortisol profiles and circadian adjustment time between nurses working night shifts and regular day shifts: A prospective longitudinal study. International Journal of Nursing Studies. 2015; 52(7): 1193–201. DOI: 10.1016/j.ijnurstu.2015.04.001
- 5. •Athar, M. E., Atef-Vahid, M. K., & Ashouri, A. (2020). The Influence of Shift Work on the Quality of Sleep and Executive Functions. Journal of circadian rhythms, 18.
- 6. Wynn, M. (2021). Storied Identity: Reading the Bible Eucharistically. *European journal for philosophy of religion*, 13(4), 45–64. https://doi.org/10.24204/ejpr.2021.3724
- 7. NAZARPOUR, S., MEHRABIZADEH, H. M., & ENAYATI, S. (2008). Comparison of mental health of shift working nurses
- 8. Nunes de Araujo, M A., Filho W D., Alvarenga M R., Oliveira R D., Souza J C, and Vidmantas S. (2017). Sociodemographic Profile of Nurses of the Hospitals Network. Journal of Nursing; 11(11): 4716-4725.
- 9. Leyva-Vela B, Liorento-Cantarero F J, and Henarejos-Alarcon S (2018). Psychological



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- and Physiological Risks of the Work in Nurses: A Cross-Sectional Study. Cent. Eur. J. Public Health; 26(3): 183-189.
- 10. Yang, E. (2021). Are Reduplicative Qua-Operators Superfluous? *European journal for philosophy of religion, 13*(2), 145-162. <a href="https://doi.org/10.24204/ejpr.2021.3079">https://doi.org/10.24204/ejpr.2021.3079</a>