

Mental health of nurses working on shifts in the emergency surgery department - field study –

الصحة النفسية لدى الممرضين العاملين في
المناوبات في مصلحة الجراحة الاستعجالية -
دراسة ميدانية -

Chemlal Safia*
Mental Health Education Talent and
Email: chemlal_saf@hotmail.fr

Azzag Rokaia
Mental Health Education Talent and
Email: rokaya_mail@yahoo.fr

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ملخص:

هدفت الدراسة الحالية إلى الكشف عن مستوى الصحة النفسية للممرضين العاملين في قسم الجراحة الاستعجالية بكل من مستشفى فرانز فانون بالبليدة، ومستشفى جوط ومستشفى تيبازة، وذلك بهدف الكشف عن الفروق في مستوى الصحة النفسية بالنسبة لبعض المتغيرات تتمثل في الجنس والخبرة المهنية، وقد استخدمنا في سبيل ذلك مقياس الصحة النفسية على عينة من 42 ممرضا وممرضة، وقد توصلنا إلى ما يلي من النتائج:

- مستوى الصحة النفسية لدى الممرضين العاملين في قسم الاستعجالات الجراحية منخفض.
- توجد فروق ذات دلالة إحصائية في مستوى الصحة النفسية لدى الممرضين العاملين في قسم الاستعجالات الجراحية تعزى لمتغير الجنس، حيث الإناث أقل مستوى في الصحة النفسية من الذكور.
- توجد فروق ذات دلالة إحصائية في مستوى الصحة النفسية لدى الممرضين العاملين في قسم الاستعجالات الجراحية تعزى لمتغير الخبرة المهنية، حيث الأكثر خبرة أعلى مستوى في الصحة النفسية.

الكلمات المفتاحية: مستوى الصحة النفسية، الممرضين، المناوبة الليلية.

Abstract:

The current study aims to reveal the level of mental health of patients working in the emergency surgery department of Franz Fannon Hospital in Blida and Hajouat Hospital and Tipaza Hospital, with the aim of detecting differences in the level of mental health for some variables of sex and professional experience We have used the mental health measure on a sample of 42 nurses, and we have reached the following findings:

- The level of mental health among nurses working in the surgical surgery department is low.
- There are statistically significant differences in the level of mental health among nurses working in the surgical department attributable to the sex variable, where females have the lowest level of mental health than males.
- There are statistically significant differences in the level of mental health among nurses working in the Department of Surgical Urgencies attributable to the variable professional experience, where the most experienced is the highest level of mental health.

Keywords: level of mental health, nurses, night shift.

* Corresponding author

Introduction:

Employees' mental health is the fuel that drives people forward and increases their productivity. The better and more successful the work manager is paying attention to this, the better his or her department or the institution he or she manages. But in order to achieve this, some steps must be committed as well as knowing and avoiding situations affecting the psyche of the staff health and psychological problems for employees through psychological stress at work. Most notably, these attitudes raise the level of sugar, pressure and heartbeat and pressure the neck vertebrae and a range of psychological effects also feel anxious, depressed, stressed and frustrated.

Perhaps one of man's most difficult occupations is nursing. Nursing is an act of helping patients and health to carry out activities that contribute to improving their health, or the restoration of health in case of illness, a science that cares for the individual physically, mentally and spiritually by caring for his or her environment, Provide health education using seminars and disseminate guidance and advice and there is an endless set of definitions of nursing but all agree that nursing is a set of services given to individuals to help them retain their normal state of health or alleviate their experiences such as organic and psychological pain. That is, it is a profession of disease prevention, diagnosis and treatment to prevent complications.

Working in hospitals as a nurse requires at least two days of shifting tonight, and a nurse working on a night shift tries to work while his body asks for sleep, sleeping while his body wants to wake up, resulting in a mismatch between bedtime, wake and the body's organic need.

When the nurse changes his shift to another shift, his body needs some time to adapt to the new work time, so as to control the daily rhythm, which is the body's ability to shift from sleep at certain hours (usually at night) to wake up, activity at other hours (usually daylight time). While shift work provides some with the opportunity to work overtime either part-time or on specific days of the week, there is a price for these to pay, and doctors say it is now incumbent upon them to use the term (Shift work disorders). As shift work changes the daily system of the body where the nurse has to work overnight and sleep by day and may have difficulty reducing the total amount of sleep.

Problématique :

The nursing profession is considered a high and human profession, because it is linked to human health, the preservation of life, the alleviation of suffering and the sense of pain, and everyone who works in this profession is called the owner of mercy; In view of the humanitarian role it plays at various stages of treatment, and in medical terms, this profession is comprehensive in the medical services provided and strives for perfection; The doctor is the first person to determine the nature of the condition and decide on the form and type of treatment; While it is incumbent on the

nurse to follow the patients' state of health, and to use all possible means to alleviate their feelings and comfort.

Nursing is one of the health services that provides the community with therapeutic services with two social and humanitarian aspects. s first nurse in the Islamic era Nursing in the modern sense originated in Britain because of doctors' need for help, where today there are a number of colleges and institutes studying nursing in the modern sense. For the maintenance of health, care and rehabilitation of patients and persons with disabilities women's nursing, maternal health, cancer nursing, dialysis, anaesthetic nursing and operations, But surgery nursing is different and self-contained because it is explicitly linked to surgery and has many risks.

Nursing occupation is one that involves little hardship or pressure for many situations in which the nurse is unable to provide any service or support whether the patient or his or her relatives Nursing is an important vital sector in our societies, where nursing is the overwhelming group of health workers in the public and private sectors, The nature of nursing work is characterized by a combination of interlocking relationships that affect public physical and psychological health¹.

Hospital nurses and nurses are exposed to varying degrees of work-related psychosocial stress in which they sometimes feel that their efforts at work are not appreciated and rewarded, Therefore, nursing occupation is one of the occupations that requires many tasks from its employees. constitutes a pressing occupation in which many sources of pressure exist, Some nurses and nurses are not satisfied with their profession, which has negative effects on their self-sufficiency, psychological and professional compatibility and often on their mental health.

A number of studies in this area have shown that nursing professionals are among the most vulnerable professionals to psychological stress, because of their sudden attitudes, a sense of responsibility towards patients, and excess workloads, the professionals have been exposed to many psychological and health problems resulting from their feeling of psychological stress at work.²

Nursing professionals face greater work pressures than others, as they are exposed to dealing with critical situations, parental pressure, acute discussions with the health team and other factors. The psychiatric health of the nurse has an important role to play in contributing to the treatment of patients. A stressed disease, anxiety and neurology cannot sufficiently accept or understand the patient's needs, and a turbulent suspension will arise between the nurse or nurse on the one hand and the patient on the other.

The real difficulty and extreme pressure faced by nurses may rise with those working at night shifts where they spend the night working, requiring special vigilance and physical and psychological effort.

Many studies have shown that alternating work is the most stress-inducing and affecting the mental health of its employees. The study was conducted in the United States of America on a sample of workers working under the alternate work system (3 - 8 in a pharmaceutical factory. The results of this study show that the proportion of 85% in the sample is concerned about things that do not warrant it, 65% of the sample has a black view of life. And the researcher explained that changing persistent physical conditions during work performance helps to reduce the effectiveness of different organic functions such as the digestive system, which fails to perform its normal functions due to the lack of blood flow.³

The nurse in the night shifts is like the rest of the workers in the same conditions are experiencing the same difficulties and obstacles "The work on the emergency surgery rotation may be more complicated because the patient desires the effect of anesthesia and the pain begins to emerge, which calls for rapid intervention by the nurse whose work in this case requires special preparation and a commitment that negatively affects his physical and psychological health. Through this study, we are trying to reveal the level of mental health of patients working in the Department of Surgery on night shifts by answering the following key question:

- What is the level of mental health of nurses working on night shifts in the department of surgical urgencies?

- It includes the following sub-questions:

- There are differences in the level of mental health among nurses working on night shifts in the department of surgical urgencies attributable to the sex variable?

- Are there differences in the level of mental health among nurses working on night shifts in the Department of Surgical Urgencies attributable to the variable experience?

2- Study hypotheses:

General premise:

- The level of mental health of nurses working on night shifts in the Department of Surgical Urgencies is low.

Partial hypotheses:

- There are differences in the level of mental health among nurses working on night shifts in the department of surgical urgencies attributable to the sex variant.

- There are differences in the level of mental health among nurses working on night shifts in the Department of Surgical Urgencies attributable to the variable experience.

3- The objective of the study:

The primary objective of the study is to reveal the level of mental health of nurses working on night shifts in the service of surgical urgencies, in order to understand the relationship between night work and its hardship and the psychological aspect of the disease, i.e. how night work is reflected in the professional pressures that characterize it on the mental health of nurses.

4-Importance of the study:

The importance of the study is to highlight an important category of workers: nurses. Their profession is lofty in that they help patients to get rid of their physical pain. They live in especially difficult conditions for those working night shifts. If we look for the level of their mental health and find that their mental health is deteriorating, we must work to find appropriate solutions to improve nurses' mental health so that they can perform their noble tasks to the fullest and promote the general health of patients.

5. Study terminology:

- **Concept of mental health:**

The definition of Francesco Jamiril (1992) that the concept of health means absence also goes on to say that the negative concept of health leads to DISEASE that the usefulness of using the procedural definition of health is objectively measured. According to the World Health Organization (WHO), health does not mean the absence of disease but means the maximum degree of physical, mental and social health of the human being... health,

which means only the elimination of pain and disease, but the maximum degree of physical, mental and social health of the human being... " Health means only the elimination of pain and disease but the development, acquisition and acquisition of more functional abilities⁴

Procedurally:

The state of adaptation, compatibility and triumph over the conditions and attitudes of the nurse in the night shift in the interest of surgical urgencies in real peace with himself, his environment and the world around him, the degree to which he gets on the scale of mental health.

- **Nursing Concept:**

Nursing is an act performed to assist the individual - sick or healthy - in carrying out activities that contribute to the improvement of his or her health or the restoration of his or her health in the event of illness or "death in peace and safety."⁵

- Nursing is a science and art that cares for the individual as a whole - body, mind and soul - and works to advance and preserve the individual spiritually, mentally and physically and to help him or her heal when he or she is sick. Caring for the sick individual extends to his or her family and community, including caring for his or her environment and providing health education through guidance and good example.

There are many definitions of nursing, but they all agree that nursing is the sum of services given to individuals and their families for the purpose of helping them to retain their normal condition or to help them alleviate their organic and psychological pain. Nursing services may also be intended to prevent illness or to help diagnose, treat and prevent complications.

If nursing is considered services to help an individual be sick or healthy to perform their daily requirements as self-reliant as possible and they need the power of observation to determine the individual's needs.

- **Concept of night shift:**

Night work: According to the 90/11 Labour Relations Act: Article 27 of the Algerian Labour Code provides that any work carried out at 9 nights and 5 o'clock in the morning shall be considered night workers, who shall determine the rules and conditions of night work and the rights associated with it through collective agreements⁶

Procedurally:

Night shift work in the field of nursing in surgical urgencies is the patient's endurance to work at night where it is determined from 8 night to 8 am.

Field study procedures:

The curriculum used:

Depending on the objectives of this research, the comparative descriptive approach is one of the most appropriate methods and methods to be followed to qualitatively and quantitatively describe different phenomena, As well as to make various comparisons related to this curriculum through which we try to describe the level of mental health of nurses working for general surgery in night shifts and we are also obliged to follow the steps of a comparative descriptive approach based on comparison between two or more phenomena, This is because we are trying to identify differences in patients' level of mental health in the interest of urgency, depending on gender and professional experience.

2. Field of Research:

The field study was conducted by Frantz Fannon Blida Hospital and Hajouet and Tipaza Hospital, in the interest of emergency surgery at night duty.

3. Sample Research:

The sample of the research was selected by way of coincidence, so that we applied the study scale to all of the nurses we accidentally interviewed by the nurses working in the emergency surgery service at night at the institutions mentioned earlier at the time of the field study, and they numbered 42 nurses and nurses.

4. Search tools:

Measure of mental health:

Researcher Ebsam Abu al-Omrin built a measure of nurses' mental health after learning about another set of measures of mental health, consisting of 68 paragraphs in his final form after his honesty and consistency were calculated. The measure included four sub-dimensions:

- Personal dimension, social dimension, professional dimension, spiritual dimension.

Responses fall under three levels: OK, neutral, not OK.

- OK 3 =, neutral 2 =, not OK = 1 for positive paragraphs

- OK 1 =, neutral 2 =, not OK = 3 for negative paragraphs

The scale scores range between (68 - 204), and the scale's high score indicates good mental health and vice versa.⁷

5. Statistical tools used:

The statistical programme SPSS has been used to process research results, based on the appropriate statistical tool and formulation of the research hypotheses as follows:

- One sample test to examine nurses' level of mental health in the interest of urgencies.

- Test (v) to study differences in the psychological health metric scores of research sample individuals by sex variants and professional experience.

Presentation and discussion of results:

Presentation and discussion of the results of the first hypothesis:

The level of mental health of nurses working for emergency surgery at night's shift is low.

To verify this hypothesis, a single sample test (v) was applied to compare the average study sample scores on the mental health scale with the hypothetical average resulting from the quotient multiplying the number of mental health scale items in the average alternative scores.

Table (1)

shows the results of the application of a single sample test (v) to compare the averages of the study sample scores on the health and presumptive average behaviour scale.

Indicative level	Degree of freedom	Value of T	Default Average	Arithmetic Average	Sample Size	Scale
0,01	41	7,888	136	129.87	42	mental health

The results of this table, following the application of the mental health measure to a sample of nurses working at night at the Emergency Surgery Service, showed that the arithmetic average was 129.87, below the hypothetical average of 136 at 41, although the difference between the two averages is not significant, which is estimated to be 6.13, and statistically data. The difference is a function of the indicative level of 0.01 between the two averages, which indicates that the first research hypothesis that nurses working at night in the emergency surgery service have a low level of mental health has been achieved.

The result of this study has agreed with some similar studies, including Colodori and others. (1990) with the aim of detecting psychophysiological discharge for night shift work and one of the most important findings was that the general activity of the worker in the night shift is characterized by the weakness and lethargy accompanied by some difficulty in performing tasks in various areas, Also, during the recall period, many of the complaints are organic pains and the same situation while working on different shifts, which is more the result of fatigue and exhaustion caused by weak energy stocks resulting from alternating system work While 91% of the sample studied suffers from sleep disorders, especially with regard to the difficulty of waking up, and 86% of the sample feels tired and overwhelmed even outside of working hours And 77% of the sample expressed poor libido, And 65% of the sample people are pessimistic about the future.

Conversely, 93% of the sample examined expressed that it regularly resorted to hypnosis at the end of working periods and even during the rest period. In addition to the consumption of stimulants, based on the results of this study, it is clear that alternate workers suffer from psychophysiological problems, the most important of which are the misuse of stimuli and sedatives necessary to ensure a normal life according to their views, The absence of a regulatory strategy to deal with the symptoms identified by the study, which are considered to be symptoms of depression For example, sleep disorders arise from psychological and physiological factors and their different interactions with each other's work environment, The social aspect in addition to the health aspect, all of which will accelerate the onset of various depressive symptoms, including: Lethargy, grief, complaining about different organic

pains even if in fact they are illusory, relying on different drugs to ensure that the energy needed to perform the work, as well as going beyond the unwanted psychological and physiological situation⁸

According to the results of the current and previous studies, nurses working on night shifts suffer from a low level of mental health. The study sample answers showed that they had different forms of psychiatric disorders that seemed to some to be simple but hindered their social life and caused them distress and embarrassment. Some have expressed the appearance of depressive symptoms, manifested by their involvement with others, their desire for social isolation, lack of desire for family visits and compliments. as many of them showed psychosomatic disorders ranging from simple to complex, Some members of the sample suffered from hypertension, diabetes and migraines, all as a result of night work. Because the continuation of night work has a serious risk to all organs of the body, especially the nervous system, So that sleep at night is considered lunch for this device to restore the effectiveness and vitality of the cerebral stone.

We therefore conclude that night work has a negative effect on the nervous system of the disease even if it is asleep, it is in a state of acute stress and has no ability to relax the function necessary for rest, resulting in the body's exposure to soils, weakness and breakdown, even if it continues to sleep day.

Presentation and discussion of the outcome of the second hypothesis:

There are differences in the level of mental health of nurses working at night at the emergency surgery service depending on the sex variable.

Table (2)
 Result of application of test (v) to study gender differences in mental health scale scores

Indicative level	Degree of freedom	Value of T	Arithmetic Average	Sample	Sex
0,05	40	5,679	134,98	26	Male
			117,18	16	Female

The results of this table, following the application of the mental health measure to nurses working at night at the emergency service, showed us that the average calculation of the male sample was 134,98, while the average calculation of the female sample on the same scale was 117,18. As can be seen, there appears to be a clear difference between the two averages of 17,80, which was confirmed by the value of "t" calculated and estimated at 5.679, at 40 degrees of freedom, which is a function value at the indicative level of 0.05, indicating the realization of the second hypothesis that there are significant differences attributable to the sex variable in relation to the mental health scale scores of nurses working at night in the interest of emergency surgery.

The outcome of our study has agreed with some previous studies, including the findings of the Niall study. (1991) aimed at examining the differences between nurses working in the intensive care department and nurses in different departments in Alexandria hospitals and comparing them with nurses And to whom each of Bick's death anxiety metrics was applied for depression, The results indicated that there were substantial linkages between death, depression and neurology concerns among the sample's members, It found that male nurses had a lower level of anxiety than nurses.

In the same vein, we find another study of happiness and others (2003) in Palestine, which aims to determine the level of psychological and practical stress faced by nurses during the Al-Aqsa uprising and identifying some personal variables, with results showing that nurses and nurses experience a high level of psychological stress associated with sources of work stress related to escorts and the seriousness of injuries The study also noted that nursing is one of the most vulnerable occupations in the workplace. Psychological stress, but nurses were more susceptible to psychiatric disorders and inability to reconcile their professional and family lives, Nurses have shown more flogginess and adaptability to professional conditions during night shifts⁹

Thus, through the results of our study, which have been supported by other previous studies, to the effect that a woman's nurse on night duty is the lowest level of mental health compared to that of a man, This is due to the nature of the woman who prefers to stay at night in her home and engage in the normal activity of women And night work is exhausting for her physically, and her body is not allowed to endure watering and fatigue like a man's body can. And the psychological nature of women is different from men. Women are more emotional and cannot afford the suffering that patients suffer at night in the interests of surgery, especially after the demise of the drug and the control of pain over the body. This is what causes her to put so much stress on her mental and physical health,

The results of the study showed that most members of the sample suffered from severe anxiety and the onset of depressive and neurological symptoms exhibited by the nurse at work. family ", as well as in the family, where their family transactions have changed since they took up night work and have become unable to separate occupational problems from family life.

Presentation and discussion of the outcome of the third hypothesis:

That there are differences in the level of mental health of nurses working at night at the emergency surgery service depending on the variable professional experience.

Table (3)

The result of applying a test (v) to study differences in mental health scale scores depending on the variable of professional experience

Indicative level	Degree of freedom	Value of T	Arithmetic Average	Sample	Experience
0,01	40	8.351	125,32	13	Less than 5 years
			130,59	29	5 years and more

Through the application of the Mental Health Measure to nurses working at night at the Emergency Service The statistical processing showed that the average calculation of the sample of nurses with less than 5 years' experience was estimated at 125,32, while the average calculation of the sample of nurses with more than 5 years' experience on the same scale was 130,59. As noted, there appears to be a difference between the two averages of -5,27, which was confirmed by the value of the "t" calculated and estimated at 8.351, which is a function value at the indicative level of 0.01, which indicates that the third hypothesis that there are significant differences attributable to the variable professional experience regarding the scores of the mental health scale of nurses working at night in the emergency surgery service is achieved for the benefit of the highly experienced.

As far as we are aware of the various previous studies related to the results of this hypothesis, we have come to some of the findings of previous studies, which are contrary to our findings. The study of Maryam Rajah (2008) aimed at measuring the psychological and professional pressures faced by nurses working in hospitals of the Ministry of Higher Education in the light of four variables: (Marital status, age, number of years of service, section or labour division (where the researcher used his questionnaire to measure the sources of work stress of nurses from their preparation.

One of the most important findings of the researcher was that there were statistically significant differences in the average nurses' scores according to the variable number of years of service in the hospital after the sources of pressure related to the relationship with management for the benefit of nurses with fewer years of service.¹⁰

This difference may be due to the nature of the nurses' work environment between the two studies. In Algeria, health in the public sphere is free of charge, i.e., citizens are treated without pay. This makes the nurse's wages very little in comparison to the effort he makes in his work, which makes him feel that he works without pay, especially in the night shifts for which nurses in other countries are entitled to a special bonus in addition to the dirty salary. The Algerian nurse is paid the same salary whether he works night or day, where night work is a necessity of work rather than a choice.

Professional experience plays a role in nurses' night-time adaptation as their work becomes a habit and they compose dire occupational conditions despite their difficulty and use mechanisms and strategies to address obstacles and pressures

encountered at work by management, colleagues or even patients and inadequate environmental conditions, While new nurses are still not used to night work, lack of sleep and staying on patients where they mingle night and day and it is difficult for them to work on first shifts, many of them collapse, especially women, or enter depressive circles and hysterical times, as they appear to have various non-chronic physical illnesses that disappear over time when they become accustomed to the new situation.

General conclusion:

The current study, supported by many previous studies, found that the level of mental health of nurses working on night shifts was low, with various symptoms of diseases varying between psychological and physical symptoms. The psychological symptoms were anxiety, depression, frustration and the appearance of aggression: The research sample showed a clear tension that appeared in the answers to the study scale that their anxiety was high and depressive symptoms of social isolation, introversion, desire to stay at home and not engage in normal social activities, The interrogators also displayed aggressive behaviors that appeared in working with their colleagues and even at home with their children and relatives. This was further prevalent among female nurses. and they also showed chronic psychosomatic disorders such as high blood pressure and diabetes, because the rate and speed of damage caused by work during the night is a surprise human body is characterized by a special natural rhythm,

known as the body's biological clock which is a programmed rhythm on sleep at night and on movement and activity at day, Night shifts have profound effects on the human body, they turn everything around. From hormones and body temperature, to mathematical abilities, mood, and brain function.

The study also found differences between women and men working in nursing, as men are better able to cope with difficulties than nursing women who easily collapse their emotional feminine nature and the nature of their bodies, which bear little fatigue and watch.

Professional experience has also played a role in improving mental health because long-term work in the field of nursing generates psychological immunity due to habituality. In time, the nurse composes professional conditions and uses techniques and strategies to cope with the pressures he faces at work where he coexists with them according to his mental health.

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