

# Stress Management Practices among Emergency Room Nurses in Bulacan Medical Center

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## Abstract

Stress in the workplace is recognized as a growing trend globally. This study aimed to characterize stress and stress management practices among emergency room (ER) nurses in Bulacan Medical Center (BMC). A descriptive research design was utilized in the study. Consecutive sampling was employed. Stress Management Practices instrument developed by Alvin Chan in 1998 was adopted and this has further undergone content and face validation before use. Results unveiled that the emergency room nurses (n=80) were mostly at the age group of 26-30 years old, dominated by females, mostly single, the majority were Roman Catholics, a meager had graduate degrees, most held an entry-level position, with 1 to 3 years of experience, had training on life support and intravenous therapy, and had monthly income amounting to Php 18,000 to Php 20,000. Denoting stress in dealing with various people, nurses usually experience average stress with relatives and visitors of patients ( $\mu=3.37$ ) and low stress in dealing with superiors ( $\mu= 1.87$ ). For stress concerning the personal condition of nurses, they often experience stress in the profession in general ( $\mu= 3.52$ ) while nurses seldom experience stress concerning their family condition ( $\mu= 2.59$ ). For engagement in various stress management practices, most of the nurses had always been praying along with trusting God ( $\mu= 4.58$ ) while the practice that was never used was to blame someone else for problems ( $\mu=1.68$ ). Support from the administrators is necessary for stress management practices to be instilled in the workplace and ensure that quality care is rendered by nurses.

**Keywords:** stress in nurses, stress management practices, emergency room nurses, stress

# 1 Introduction

Stress is a word everybody uses these days. This may be considered a fact of everyday life [1]. Consequently, stress is commonly used in a daily discourse which refers to experiences that cause feelings of anxiety and frustration because they threaten one's security or push one beyond his/her boundaries to successfully cope with a given scenario. Besides time pressures and daily hassles in the workplace and at home, stressors have also been described about economic insecurity, poor health, danger, toxic, and noise in the environment, and interpersonal conflict [2]. There is no doubt that stress is very much a part of everyday endeavors in the environment of everyone. Examples include the stress experienced by people in the context of illness and injury, the stress experienced in the practice of his/her work, etc.

Biological stress is defined as a general reaction of the body to any stimuli. Stress is the automatic or conventional response of an individual to anything that induces the body to cope with it. To be able to cope up is indeed necessary for oneself to live one day at a time [1,3].

Emergency room nurses are predominantly exposed to stressful work-related scenarios and erratic work conditions such as dealing with life-threatening situations that lay the fate of the patients in the hands of the health care providers [4]. This coincides with a study that stipulates that emergency room nurses experience higher stress levels that leads to turnover intentions [5]. Given diverse patients with a variety of conditions, occupational stress among nurses in the emergency department is truly a common problem [6]. It is inevitable to deal with loads of feelings or emotions when caring for critically ill and injured patients. Emergency room nurses are vital to the delivery of immediate care in a medical institution. Thus, it is right and just to focus on assessing the welfare of the sector to safeguard their health and the delivery of quality care to patients.

Studies have been made regarding the stress of patients, staff

nurses, students, educators, and others. Stress specifically in the workplace is being recognized as a worldwide problem [7]. The nursing profession seems to experience more stress at work in contrast to other health care professionals due to the nature of work they perform every day [8]. Likewise, ER nurses deal with acute life-threatening situations of not only a single patient but every person that enters the emergency room that needs to be given immediate attention wherein failure to do so might cost them their lives. Stress cannot veer away from nurses since they are not only responsible for the delivery of safe and quality care, but they need to bear in mind that holistic care should be provided to patients along with the other aspects of performing one's function (e.g., documentation, dealing with significant others, etc.) altogether [9,10,11].

Being emergency room nurses for several years, the researchers had been eyewitnesses to stress and stressful situations that nurses in this area endure. Stress and stress management practices among emergency room nurses in the Philippines are not well documented in the literature. As health professionals, ER nurses taking care of the health needs of patients in an acute clinical setting need a healthful environment and workplace for them to function at their fullest. This includes the management of stress in the workplace. Hence, this study on stress and the stress management practices among emergency room nurses in Bulacan Medical Center is deemed necessary.

The study aimed to characterize stress experiences and stress management practices among emergency room nurses. Specifically, the following questions guided the investigation:

1. What is the profile of the emergency room nurse according to:
  - 1.1 age
  - 1.2 sex
  - 1.3 civil status
  - 1.4 religion
  - 1.5 educational attainment

- 1.6 present position
- 1.7 years of experience in the emergency room
- 1.8 numbers of seminars and trainings attended
- 1.9 monthly income
2. To what extent do ER nurses experience stress when relating to various people namely:
  - 2.1 superiors
  - 2.2 peers
  - 2.3 patients
  - 2.4 relatives and visitors
  - 2.5 general public
3. To what extent do ER nurses experience stress concerning their personal condition:
  - 3.1 work
  - 3.2 working condition
  - 3.3 environment
  - 3.4 profession in general
  - 3.5 family condition
  - 3.6 socio-economic conditions of the family
  - 3.7 social obligations
  - 3.8 time management
4. How often do ER nurses engage in various stress management practices?

## **2 Methodology**

A descriptive research design was utilized to describe the stress experienced and the stress management practices among emergency room nurses. Consecutive sampling was employed in selecting 80

emergency room nurses as respondents in a 300-bed capacity medical center in Bulacan. This is a tertiary hospital that caters to the population of the province of Bulacan. The Stress Management Practices instrument developed by Alvin Chan in December 1998 was adopted. It consists of four parts with items grouped under specific topics to facilitate responses. Part I included the socio-demographic profile of the respondents. This includes the age, gender, civil status, religion, educational attainment, present position, years of experience in the ER, seminars, and trainings attended, and respondent's monthly income. Part II focused on the respondents' stressful experiences concerning relationships when relating to various people namely supervisors, peers, patients, relatives and visitors, the general public. Part III is about the stressful experience of ER nurses concerning their personal condition regarding work, working conditions, environment, the profession in general, family condition, socio-economic condition, social obligation, and time management. Part IV inquired about the engagement in various stress management practices of nurses.

Face and content validity of the instrument was further established by a panel of experts which included the head of Research and Development Office of La Consolacion University Philippines (LCUP), a faculty researcher from LCUP, a junior consultant (medical doctor) from Bulacan Medical Center (BMC), and the head of the Emergency Room Department of BMC.

Permission was sought from the director of the hospital, the chief nurse, and the head nurse of ER Department of Bulacan Medical Center to conduct the study. Upon approval, instruments were personally distributed to the respondents and were consequently retrieved upon completion. Verbal informed consent from the respondents was solicited by the researchers. The responses of the subjects were treated with utmost privacy and confidentiality.

The data that were gathered were organized and analyzed with the utilization of Microsoft Excel version 2016. To characterize the profile of emergency room nurses, frequency count and percentage

were utilized. To describe the stressful situations encountered by emergency room nurses when relating to various people, stress experienced in personal conditions and the engagement in stress management practices were quantified by weighted mean. The degree of intensity of responses from stressful situations encountered by emergency room nurses when relating to various people was determined through a Likert Scale using the following equivalents: weight of 5 has the descriptive equivalent of “very high” with a range scale of 4.21 - 5.0; the weight of 4 is described as “high” with a range scale of 3.41 – 4.20; the weight of 3 is characterized by “average” with a range scale of 2.61 – 3.40; the weight of 2 is described as “low” with a range scale of 1.81 – 2.60; and lastly, the weight of 1 is identified as “very low” with a range scale of 1.0 – 1.80. To measure the stress experienced in personal conditions and the nurses’ engagement in various stress management practices, the following Likert scale was employed: weight of 5 with a range scale of 4.21 - 5.0 is described as “always”; the weight of 4 with range scale of 3.41 – 4.20 is labeled as “often”; the weight of 3 with a range scale of 2.61 – 3.40 is described as “sometimes”; the weight of 2 with a range scale of 1.81 – 2.60 is characterized as “seldom”; and lastly weight of 1 with an equivalent range scale of 1.0 – 1.80 is described as “never”.

### 3 Result

Presented in Table 1 is the profile of emergency room nurses at Bulacan Medical Center.

Table 1. Profile of the respondents

| <i>Socio-demographic profiles</i>                            |                                       | <i>f</i> | <i>%</i> |
|--|---------------------------------------|----------|----------|
| <i>Age<sup>a</sup></i>                                       | 21-25                                 | 21       | 26.3     |
|  | 26-30                                 | 36       | 45.0     |
|  | 31-35                                 | 18       | 22.5     |
|  | 36-40                                 | 1        | 1.3      |
|  | 41-45                                 | 4        | 5.0      |
| <i>Gender<sup>a</sup></i>                                    | Female                                | 46       | 57.5     |
|  | Male                                  | 34       | 42.5     |
| <i>Civil Status</i>  | Single                                | 53       | 66.3     |
|  | Married                               | 27       | 33.8     |
| <i>Religion<sup>a</sup></i>                                  | Roman Catholic                        | 69       | 86.3     |
|  | Iglesia ni Cristo                     | 6        | 7.5      |
|  | Born Again                            | 3        | 3.8      |
|  | Methodist                             | 1        | 1.3      |
|  | Others                                | 1        | 1.3      |
| <i>Educational Attainment<sup>a</sup></i>                    | College Graduate                      | 69       | 86.3     |
|  | Master's Degree                       | 5        | 6.3      |
|  | Doctorate Degree                      | 3        | 3.8      |
|  | Master's degree (units)               | 3        | 3.8      |
| <i>Present Position<sup>a</sup></i>                          | Nurse 1                               | 78       | 97.5     |
|  | Nurse 2                               | 2        | 2.5      |
| <i>Years of Experience<sup>a</sup></i>                       | 1-3                                   | 34       | 42.5     |
|  | 4-6                                   | 23       | 28.8     |
|  | 7-9                                   | 13       | 16.3     |
|  | 10-12                                 | 5        | 6.3      |
|  | 13-15                                 | 3        | 3.8      |
|  | 16-18                                 | 2        | 2.5      |
| <i>Number of Seminars and Trainings Attended<sup>b</sup></i> | Intravenous Therapy Training (IVT)    | 75       | 93.8     |
|  | Basic Life Support (BLS)              | 59       | 73.8     |
|  | Advanced Cardiac Life Support (ACLS)  | 38       | 47.8     |
|  | Pediatric Advance Life Support (PALS) | 7        | 8.8      |
|  | Neonatal Advance Life Support (NALS)  | 4        | 5.0      |
| <i>Monthly Income<sup>a</sup></i>                            | 15,000-17,000                         | 12       | 15.0     |
|  | 18,000-20,000                         | 58       | 72.5     |
|  | 21,000-23,000                         | 10       | 12.5     |

<sup>a</sup>n=80; <sup>b</sup>n=142

Table 1 describes the profile of the respondents wherein they were dominated by the age group of 26-30 (36, 45.0%). More than one-half of the ER nurses were females (46, 57.5%). The majority of them were single (53, 66.3%). Most of the nurses are Roman Catholics by religion (69, 86.3%). In terms of educational attainment, a majority did not pursue graduate studies (69, 86.3%). Most of them were in Nurse 1 position (78, 97.5%). Almost half had 1 to 3 years of experience (34, 42.5%). Almost all have had Intravenous Therapy Training (75, 93.8%). Their monthly income mostly ranges from Php 18,000 to Php 20,000 (58, 72.5%).

Depicted in Table 2 is the extent of ER nurses' experiences of stress when relating with various people namely superiors, peers, patients, relatives, and visitors of patients and the general public.

Table 2. Stressful experience of ER nurses when relating to various people

| Stressful experiences when relating with | Mean | Interpretation |
|--|------|----------------|
| superior                                 | 1.87 | Low            |
| peers                                    | 3.04 | Average        |
| patients                                 | 3.20 | Average        |
| relatives and visitors                   | 3.37 | Average        |
| general public                           | 3.34 | Average        |
| Overall mean                             | 2.96 | Average        |

n=80

Although interpreted as with average stress, nurses usually experience stress with relatives and visitors of patients as revealed by the highest mean of 3.37. Nurses experience low stress in dealing with superiors exhibited by the mean of 1.87 as depicted in Table 2. The overall mean for the stressful experiences of ER nurses when relating to various people is 2.96 which has a verbal equivalent of average.

Table 3 illustrates the extent of ER nurses' experience of stress concerning their personal condition which pertains to work, working condition, environment, the profession in general, family condition, socioeconomic status, social obligations, and time management.

Table 3 describes that the nurses often experience stress in the profession in general as this acquired the highest mean value ( $\mu=3.52$ ). While the lowest of the mean values revealed that nurses seldom experience stress concerning their family condition ( $\mu=2.59$ ). The overall mean for the experience of stress concerning personal conditions of emergency room nurses reveals a rating of 3.09 with a verbal description of sometimes.

Table 4 describes the engagement of emergency room nurses in various stress management practices identified namely: hope things will get better; eat, chew gum or smoke; pray and trust in God; get

Table 3. Stressful experience of ER nurses concerning their personal condition

| Stressful experience of ER nurses in relation to | Mean | Interpretation |
|--|------|----------------|
| work   | 3.25 | Sometimes      |
| working condition                                | 3.33 | Sometimes      |
| environment                                      | 3.15 | Sometimes      |
| profession in general                            | 3.52 | Often          |
| family condition                                 | 2.59 | Seldom         |
| socio-economic status of their family            | 3.00 | Sometimes      |
| social obligations                               | 2.92 | Sometimes      |
| time management                                  | 2.92 | Sometimes      |
| Overall mean                                     | 3.09 | Sometimes      |

n=80

nervous and worry; seek comfort or help from the colleagues; want to be alone; laugh it off, figure things could be worse; try to put problems out of my mind; cry, get depressed, get mad, curse, swear; withdraw from the situation; work out tension with physical activities and take out it on someone or something else; do nothing in the hope that the problem will take care of itself; take medications; blame someone else for your problems; do meditation and relaxation exercises.

Table 4. ER nurses' engagement in various stress management practices

| Stress management practices  | Mean | Interpretation |
|--|------|----------------|
| hope things will get better  | 4.24 | Always         |
| eat, chew gum, or smoke  | 2.38 | Seldom         |
| pray and trust in God  | 4.58 | Always         |
| get nervous and worry  | 2.96 | Sometimes      |
| seek comfort or help from the colleagues   | 3.16 | Sometimes      |
| want to be alone   | 2.48 | Seldom         |
| laugh it off, figure things could be worse   | 3.00 | Sometimes      |
| try to put problems out of my mind   | 3.33 | Sometimes      |
| cry, get depressed, get mad, curse, swear  | 2.48 | Seldom         |
| withdraw from the situation  | 2.25 | Seldom         |
| work out tension with physical activities and take it out on someone or something else | 2.81 | Sometimes      |
| do nothing in the hope that the problem will take care of itself                       | 2.73 | Sometimes      |
| take medications   | 2.03 | Seldom         |
| blame someone else for your problems   | 1.68 | Never          |
| do meditation and relaxation exercises   | 2.90 | Sometimes      |
| Overall mean   | 2.87 | Sometimes      |

n=80

For the engagement of ER nurses to various stress management

practices, most of the nurses had been praying along with trusting God ( $\mu= 4.58$ ) as these got the highest mean with an equivalent description of “always” while the stress management practice that was not used was to blame someone else for problems ( $\mu=1.68$ ) with a verbal description of “never”. The use of stress management practice was generally rated with an overall mean of 2.87 which was verbally described as “Sometimes”.

## 4 Discussion

### Profile of ER Nurses

The socio-demographic characteristics of the respondents of a particular study usually convey a description of the sample of the study. In this study, the socio-demographic profile of the respondents was used to describe and understand stress and stress management practices of the emergency room nurses of BMC.

**Age.** The majority of registered nurses in Philippine hospitals (73years and younger which coincides with the findings of the study that the concentration of the ages of the ER nurses was on below 40 years of age, particularly, aggregated on the age group 26 to 30 years [19-20].

**Sex.** The nursing profession is dominated by females as the profession is inclined to aspects of femininity [12] but nowadays as time changes, if the sex statistics of this study will be examined, the males almost equal the number of female nurses. This supports the results of the study wherein female distribution was only slightly higher than the males.

**Civil Status.** Most of the respondents were single which somehow does not coincide with the given the prevailing age group for the respondents, that is the most common age for one to get married in the Philippines as evidenced by the age of brides and grooms who got married between ages 25-29 years old in 2017 as to the Philip-

pine Statistics Authority [13].

**Religion.** The Roman Catholic religion prevails the respondents. This is attributable to the fact that the Philippines is the only Christian nation in Asia and more than 86% of the total population is Roman Catholic [14].

**Educational Attainment.** A meager portion of the respondents had pursued graduate studies. In the United States, between the years 2000 and 2018, educational attainment rates among 25- to 29-year-olds revealed that the percentage with a master's or higher degree increased from 5 to 9 percent [15]. In the Philippines, it was reported in 2010 that 241,242 (0.3%) out of 81.9 million households population for age six years and older had pursued graduate studies [16]. In addition, there may be inadequate support from either the department or the hospital for skill development training and pursuing continuing professional education such as a master's degree [10].

**Present Position.** The majority of nurses are in Nurse 1 position as this is the entry- level for staff nurses.

**Years of Experience in the Emergency Room.** Nurses who become seasoned in the ER were scarce in number. This may be due to high turnover rates of nurses going abroad to find greener pastures for themselves and their families [17].

**The number of Seminars and Trainings Attended.** Being in the critical care nursing field in the emergency room, the majority of the respondents have Intravenous Therapy Training along with Basic and Advanced Cardiac Life Support skills which are necessary to everyday practice in the area.

**Monthly Earning.** The average monthly salary of entry-level nurses in the Philippines is Php 19,077 which is the Salary Grade 11 [18].

## **Stressful experiences of ER nurses when relating to various people**

Relationship with Patients' Relatives and Visitors. The average stress level was brought by the relationship with the relatives and visitors of patients ( $\mu=3.37$ ). Patients' relatives and visitors may become unreasonable in the beginning because of the anxiety brought by the immediate care need of their patient and this brings stress to nurses dealing with the patient in the acute care setting. Working in the emergency department may contribute to elevated levels of stress for nurses due to the work environment, events, and conflicts that they faced along intending to provide quality care but a supportive work environment may help manage all these [21].

Relationship with superiors. ER nurses do not consider their superiors as a stressor in the workplace as the results suggest that there is a low level of stress ( $\mu=1.87$ ) as perceived by the respondents. Analysis of the result implies that the respondents believed that stressful situations if ever they are present in the emergency room cannot be attributed to the relationships which they have established with their superiors. Superiors of nurses become a stress factor whenever they are unable to provide social support to their staff [19]. Likewise, working with a supervisor in the unit is positively associated with greater stress levels [20] which have been negated by the study findings.

The study result of having an overall mean of 2.96 which indicates average stress levels is congruent to a cross-sectional study wherein 341 nurses working in Jimma Zone public hospitals in Southwest Ethiopia indicated an average overall job-related stress level [8].

In their daily work in the emergency room, nurses are encountering various people from all walks of life and are prone to come across situations that could cause stress that can ultimately affect the efficiency of their work since emergency nursing is branded by unpredictability, overcrowding, and continuous confrontation with a vast range of diseases, injuries and traumatic scenarios [4].

## **Stressful experience of ER nurses concerning their personal condition**

The Profession in General. A high level of stress had resulted from the study for the nursing profession in general ( $\mu= 3.52$ ). This equates with the research findings that nurses experience high levels of stress in performing work associated with the nursing profession [32-33]. Similarly, high-stress levels were posited in this study which is the same as the study of several others concerning the nature of the nursing profession [29, 32, 33].

Family Condition. Occupational stress exists in every profession, nevertheless, the nursing profession appears to experience more stress at work compared to other health care workers [8]. But with the finding of low-stress levels for family conditions, it seems that somehow, their families do understand the nature of work that they have to perform and the responsibilities they have to carry out which means that they are well supported by their family leading to lesser stress in this category.

The duties and responsibilities that come with work about the performance of activities related to the role which is assumed by a person within a given environment may be possible causes for the onset of stress in an individual regardless of the nature of work performed. It is important to identify the extent and sources of stress in healthcare workers to find stress management strategies to help everyone and the workplace as well. Occupational stress influences nurses' health in association with quality of life negatively that it might also be considered a possible influence on patient outcomes [11].

## **ER nurses' engagement in various stress management practices**

Overall, the use of stress management practice was rated as "Sometimes" ( $\mu=2.87$ ) but most of the ER nurses employ praying and trust-

ing God ( $\mu= 4.58$ ) to cope with stress. This reflects an undeniable characteristic of a Filipino nurse who is rooted in spirituality as well in the practice of the profession compared to others who employ several coping strategies including walking away, taking a break, and engaging in relaxing activities [10]. Also, the findings revealed that nurses do not resort to blaming someone else for problems ( $\mu=1.68$ ) as this got the lowest mean equivalent for engagement in various stress management practices.

Stress management practices may vary among individuals are no two individuals are alike. Stress in the nursing workplace has significant consequences for healthcare workers, the institution, and the patients. These may be psychological and physical health deterioration, financial and social impact, and impaired professional practice. The individual and institution must develop interventions to reduce stress and manage it. Thus, help to retain valuable human resources within nursing [9].

Regular assessment of staff perceptions in the emergency department's working environment allows for local, national, and international comparisons that are essential to inform and support developments that lead to formulation or evaluation of the effects of practice interventions as well as management [7].

One limitation of the study was its scope that it was focused only on nurses at the emergency room department of Bulacan Medical Center. The study was only descriptive that solicits characterization of the stress and stress management employed by these nurses and no associations were tested.

## 5 Conclusion

Based on the findings revealed in the study, the following conclusions were drawn:

1. The nurses in their young adulthood dominate the emergency

room. The age group is composed mostly of single females, mostly Roman Catholics, holding staff nurse (Nurse 1) positions. This may be attributable to the fact that at the young adulthood stage, nurses start their careers mostly in hospital settings.

2. Nursing is indeed a stressful profession that deals with people from all walks of life on a day-to-day basis. Most nurses had one to three years of experience in the emergency room which means that they are mostly beginners in the profession that they tend to be stressed about the things that they experience which were new to them. It was good that nurses perceive low stress with their supervisors as they may be subdued to a harmonious working relationship leading to lesser stress experience for the emergency room nurses.
3. Nurses sometimes experience stress concerning their personal condition. As the very nature of the profession is stressful, personal endeavors may add to the feelings of stress. All of these may contribute to the stress level perceived by each ER nurse which in turn may affect the efficiency of nurses at work, the behavior, as well as the quality of care rendered to acute and critically ill patients in the area.
4. The emergency room nurses' prevailing stress management practice is somehow rooted in spirituality. It was found out that one of the most common stress management practices that a nurse performs when confronted with a stressful situation, was that the nurse prays and trusts in God. It signifies that when the ER nurse is confronted with a stressful situation, as a good Christian and firm believer in the omnipotence of God, the nurses' first instinct was to pray and completely believe that His will be done.

In the light of the conclusions drawn, the following recommendations are proposed:

1. Emergency Room nurses shall be helped to deal with workplace stress, giving particular consideration to their profile to

- better adapt stress management strategies to them. Also, the researchers suggest mentoring and peer coaching from senior nurses to entry-level staff nurses who predominate the emergency room to better deal with the stresses in the area.
2. Nurse managers, termed as superiors, having them perceived by the nurses to cause low-stress levels, are the key persons to instilling stress management practices in the area. They must find ways on how to incorporate more approachable, supportive, and unbiased strategies in reducing stress in the workplace. They must broaden their understanding and act as an advocate for the emergency room nurses.
  3. The stress-causing factors may be vast aside from the ones given the emphasis in this study. It would be best to find out what are these to come up with several strategies on how to combat them.
  4. In line with the positive stress management practices utilized by the ER nurses, these must be cultivated for it to flourish and there must be support from the administrators of the hospital for stress management practices to be held in place to safeguard quality nursing services rendered by staff nurses. As one of the strategies engaged on by the nurses has something rooted in spirituality, the researchers suggest allocating a prayer room that can be utilized not only by nurses but for all staff and patients too who might need time and space to talk and reconnect with God.
  5. The study may be replicated to a larger population of nurses, in different departments aside from the emergency room, and maybe correlated to other factors that may or may not relate to stress to further validate the descriptive findings of the study.

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## 7 Conflicts of Interest

The authors declare no conflict of interest.

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