# Structural and Process Standards in Emergency Ward of the Selected Hospital of Isfahan University of Medical Sciences

H. Hosseini\*, Kh. Tavakol\*\*, A. Mashhadizadeh\*\*\*

## Abstract

**BACKGROUND:** As the nurses working in emergency ward are the first group who make early interventions to save critical patients, this is considered as a need for them to get enough knowledge and skills in this field. On the other hand, standards show nurses to the appropriate level of care quality (the meaning of sentence is not clear). Ignoring structural and process standards can result in personnel dysfunction and their low nursing services. This study has tried to define the mean obedience of structural and process standards such as physical environment, facilities and manpower as well as process standards like patient care in an emergency ward of a selected hospital of Isfahan university of medical science.

**METHODS:** This was a descriptive cross-sectional study carried out in a selected hospital of Isfahan university of medical science. First, a checklist for physical environment, facilities and manpower was designed and the data were collected from the emergency ward personnel (nurses and nurse aids) working in the ward through direct and indirect methods. Then, the collected data were analyzed by descriptive statistics after being classified.

**RESULTS:** The findings of the study showed the ward had obedience level of 83.8% for physical environment, 75% for facilities and equipments and 64.5% for manpower. About 46% of the personnel had excellent efficacy and 32.9% had low to moderate efficacy.

**CONCLUSIONS:** According to the results, we have good manpower programs; efficient records control tools and adequate facilities. Meanwhile, strategies of motivation and job satisfaction enhancement which need a board attitude should not be ignored but considered as well.

KEY WORDS: Processes Standard, structure standard, nursing care standard

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The emergency ward has special importance in many aspects such as therapy, economy, emotion, social and legal issues .So focusing on it can help us improve its conditions <sup>(1)</sup>. The word emergency means having the feel of danger or having a crucial experience, and emergency wards always face many emergency situations. Nurses working in these units are the first group who begins the rescue operation to save the patients in bad conditions <sup>(2,3)</sup>. Therefore, not only all nurses need to have the enough knowledge of

their skill but also need to be able to make decisions in crucial situations <sup>(4)</sup>. The society needs the presentation of desirable services in different emergency units, some patients should be cared in these units and this caring should be improved. The nature and essence of emergency units is nursing cares and this care is crucial. Therefore, scientific management is a necessary and vital need in the emergency ward. By proper management these therapy units can achieve their different purposes <sup>(2,5)</sup>. The standards reveal the great quality of the

<sup>\*</sup> MSc, Department of Health, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran.

<sup>\*\*</sup> MSc, Department of Health, School of Nursing and Midwifery, Isfahan University of medical sciences, Isfahan, Iran.

<sup>\*\*\*</sup> BS, Department of Operating Room, School of Nursing and Midwifery, Isfahan University of medical sciences, Isfahan, Iran. Correspondence to: Habibollah. Hosseini MSc.

E-mail: h\_hoseini@nm.mui.ac.ir

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work and nursing service should be considered as a criterion to form structure, do activities and achieve goals. Unfortunately, presenting not standard services can directly affect the health of the society. In this field the results of Naji et al has shown that too much work and insufficient time for the cares, the lack of the sufficient number of nursing personnel, the shortage of necessary equipment and undesirable present resources in the ward would hinder the presentation of standard services (6,7). In another research done by Rahimi et al in 2002 besides the comparison with the managing standards, manpower, environment, equipment, training activities and instructions, it evaluated the relative parts by using questionnaires. Based on the findings of this research there is undesirable situation in 50 percent of the society investigated in the field of the space and equipment. Also an average function in 100 percent of the society has been reported (1). Another research has been done by Ja'afarrian to examine the use of the structural and process standards in the dressing of a wound in surgery wards of hospitals of Hamedan. The results showed that the majority of members have not performed the necessary standards of dressing a wound in both the structural and process units (8). Also in a research by Abdeyazdan some factors like indefinite duty of the emergency personnel, insufficient information and insufficient and unsuitable distribution of the personnel are obstacles preventing the proper function of the nursing services in emergency ward (2).

Taking into account this fact that the present research examined the structures and standards according to survey or by using instruments to classify the hospitals, and with these instruments the presentation of services in emergency wards were not considered, we tried to do a study with the purpose of determining the average score of the performance of standards in the field of physical environment, equipment, manpower, and caring patients and compare them with existing standards in the emergency ward of a selected hospital of Isfahan University of Medical Sciences.

# Methods

Our study was a descriptive cross-sectional study that described the situation and method of caring of patients and performance of the standards in the emergency ward of a selected hospital of Isfahan University of Medical Sciences.

The study was done on employed personnel in the emergency ward, the physical environment and equipment of the emergency ward. The study samples were consisted of all personnel (89 members) employed in the emergency ward of the hospital that were working there at the time of the research. The sampling method was simple. The checklist of the observation of the physical environment; equipment and manpower of the emergency ward and the tools of controlling accounts of nursing were provided. Managing ways and the patients ranking order were used to evaluate the manpower standard in the emergency ward and the sufficient number of manpower for this ward was identified. Then by using the existing sources in the field of the standards of nursing, the tool of controlling the quality of the nursing cares in the emergency ward were provided (7,9), this tool involved 19 questions about the level of the nursing cares, skills, communication between the patient and his/her family. The reliability of the tools was identified by test-retest method and for the determination of the validity we evaluated the content-based validity according to the experts' ideas. The necessary information was collected directly or indirectly from the emergency ward and its personnel (nurses & nurses' aids) by our researcher. Information about physical environment, equipments and manpower were collected by the researchers' direct observation and the check list. The method of caring of the patients was evaluated with the tool of controlling account and with the presence of the researcher and his colleagues in emergency ward of different times and by the unStructural and process standards in the emergency ward  $\dots$ 

sensed observation of presentation of the cares by the personnel. After collecting the data, the analysis of the information was done by using the descriptive statistics by using SPSS software.

## Results

Distribution of the samples according to their jobs showed that 76.4 percent nurses and 23.6 percent nurse aids. Moreover the most number of the employed personnel in the emergency ward of the research environment (58.26 percent) had over 16 years of and a low percent (23.52 percent) of them had 1 year of working experience. The scores obtained in this study showed that this ward had a desirable condition in different parts as following: physical environment 83.8, equipment and possibilities 75, physical environment and equipment and possibilities together 78.8 (Table 1). Also the results showed that this ward had the 64.5 percent of the desirability in manpower. The total results of the tool of controlling accounts in nursing cares illustrated that 17.86 percent of the personnel employed in this ward had low efficacy, 15.04 percent had average efficacy, 20.96 percent had good efficacy and 46.06 percent had excellent efficacy (Table 2).

 Table 1. comparing the physical environment, equipment

 and manpower of the emergency ward of the research

 with the existing standards

	score	percent
-Physical environment and emergency equipment (re- search environment)	56	%78.8
-Standard	71	100
- Manpower (research envi- ronment)	104.5	64.5
-Standard	162	100

 
 Table 2. Ranking the emergency personnel of the research environment according to the obtained scores from the observed control-account checklist

scores	number	percent
Low (%0-%25)	16	17.86
Moderate (%26-%50)	13	15.04
Good (%51-%75)	19	20.96
Excellent (%76-%100)	41	46.06
Sum	89	100

### Discussion

The results of this study showed that the majority of the samples in the study were good experienced cases presenting the services in the emergency ward. Also the research environment had 64.5 percent of the desirability in the case of the manpower. Similar results were obtained in a similar study by a researcher in a selected hospital of Tehran University of Medical Sciences. The mentioned hospital showed 77 percent of the desirability regard to the manpower <sup>(9)</sup>. The research findings also showed that the emergency unit of the research environment had the 78.8 percent desirability in view of the physical environment and equipment together. In the study by Naji et al, the lack of the necessary equipment (72.5 percent) and existing undesirable possibilities in the ward (65.2 percent) were the reasons that greatly affected the performing standards (7). It seems that the high score in the physical environment and equipment in the present research is affected by the modernity of the hospital. The obtained scores in tool of controlling account have shown that 67.2 percent of the employed personnel in this ward totally had the excellent efficacy rather than good. This number differed from the similar research in a selected hospital of Tehran University of Medical Sciences that 95.2 percent of the employed personnel had an average efficacy. These findings indicated that the environment of the present research was more successful because of using experienced and more educated personnel in presenting nursing cares and techniques. Totally, regard to the point that ineffective managing in nursing cares would result in the deviation of the standards care, it should be consider that the continuous evaluation of the professional instruction of the nurses and controlling account of the method of presenting the services, determined as a tool to maximize the level of the quality of the nursing cares (10), but it seems that performing the tool of controlling account method of presenting the services by the managers of different nursing classes can have a special importance. As a suggestion we can say that to achieve the structural and process standards in nursing cares in the emergency ward it is necessary to have the most designed

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and effective management in evaluation the nursing cares, providing needed manpower according to the identified explanation and then the sufficient and suitable equipment and possibilities.

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