

Research Article**Situation of Staffing Allocation in Shariati Hospital
of Tehran Medical University**

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ABSTRACT

Introduction: Nowadays health care system is facing inappropriate special staffing distribution challenge not only in Iran but all over the world. Current study has been done with purpose of survey on How to allocate nursing force to selected hospitals of Tehran Medical Science University.

Research Method: This study is descriptive analytical and its studying society includes all units with nursing personnel (Nurse, Paramedic and Nurse Aids) in Shariati Hospital of Tehran Medical University. Data has been gathered through self-made forms of researcher and its analysis has been done by Excel, descriptive statistic indexes and recommended Standards guidance by Health Ministry.

Finding: Results of Estimations in 16 units of studying hospital and comparing it to current situation shows that based on Health Ministry's recommended pattern, only one unit (6.25%) was matched by this pattern from staffing, 11 units (66.75%) were lower and 4 units (25%) were upper than this pattern.

Conclusion: It seems staffing distribution in studying hospital doesn't follow and specific pattern and this is more affected by ministerial circulars and instructions. So it suggests that staffing schematization model be planned and performed by health system particles.

Keywords: Staffing, nurse, hospital, personnel standards

INTRODUCTION:

5 – 10% of government charges in most developing countries are allocated to health (1) and among different particle of health system, hospital services are the most factor in growing charges (2). Hospitals from combination of different manufacturing factors like physicians, nurses, other service personnel, hospital beds and

consumable equipment and objects, produce health care services and present them to society. Hospitals as the greatest centers of health servicing, make the most part of resources and credits of health and treatment sector in country for itself, so in our country about 40% of health expenditures is related to hospital cares (3, 4).

While among hospital operational charges, the charges related to human resources have most rates of hospital charges and in our country on average, staffing charges is estimated 55 – 60% from all hospital operational charges (5). Based on done studies, lack of nursing force or its inappropriate distribution is considered as from the greatest problems of hospitals in country (6). So standardizing nursing force counts and method of distribution in clinical units and specifically in emergency room is necessary to upgrade the efficiency and quality of presenting services to patients. Better benefiting of current facilities and upgrading the efficiency in hospitals (7). Value of real count determining of essential staffing in hospital units like emergency room, with its complexity is totally obvious and its one of important concerns of hospital management (8, 9). Undoubtedly, hospital privacy and standards compliance according to true management will bring increase in hospital service efficiency and performance. In middle of this, staffing is the first and the most fundamental part of hospital organization. Staffing importance in presenting hospital services is undeniable and without trained and appropriate staff, hospital activities will be interrupted. Factually, appropriate combination of physicians with their required professions, nurses, technicians, paramedics and ... has a basic role in optimal circulation of hospital works and service presenting (10). In global level and during the ages, several models and methods have been presented for foreseeing manpower. Goodman and Viant had expressed those effective factors on developing these methods and models and also applied limits of each of them in staffing long term planning in a historical survey during past century (11, 12). Staffing is considering as the most important resource and assets of hospital and its shortage and excess can affect in quality reduction of service presenting to patients. Most of hospital problems are due to lack of staffing and inappropriate distribution in labor force (13, 14). Based on *Arab and et al* (1388), studying hospitals were facing staffing shortage they didn't have correct management and planning on

staffing. Also different researches have been done that mentioned to displeasure matter of nurses in hospitals which its greatest reason is related to nursing personnel shortage (15, 16). It must be noted that medical and paramedical personnel possessions more than 70% of hospital personnel and from point of current cost it is allocated 65 – 70% of charges to itself. The greater matter is that based on Health Ministry Report, bed occupancy coefficient in Iran hospitals just about active beds don't exceed 60% (17). Staffing planning, predicts future supply and demand of organization for its personnel regularly. By guaranteeing counts and types of required personnel, human resource unit can predict recruitment, selection, educate and occupational planning and other activities better. If organization doesn't be equipped by counts and types of suitable manpower appropriately, organization programing may lead to failure. Executives have prognosticated that main key to success programs is manpower because eligible men make successful performance of program easier (18). Prime purpose of this study is to estimate required hospital staffing based on recommended pattern of Health ministry and doing this study is a step toward matching to hospitals personnel standards and manifesting shortage and excess of required staffing in Shariati Hospital of Tehran Medical Science University and determining what occupational level are these shortage and excess and eventually revealing that how far is the hospital from Health Ministry personnel standards.

MATERIALS AND METHODS:

This research is kind of health system management studies in a way of descriptive – analytical. Studying society in this research includes all units with nursing personnel (Nurse, Paramedic and Nurse Aids) in Shariati Hospital of Tehran Medical University. Data has been gathered through self-made forms of researcher with utilization of recent research that have been done for this reason. In this research there's three types of data gathering forms as following:

1. This form is related to clinical units' authorities that through it the current situation of these units has been determined.
2. This form is related to medical records unit that has been used for units' beds occupancy percentage, counts of active beds and patients' average inhabitancy in clinical units.
3. This form is designed to determine current situation of studying manpower and personnel structure that has been completed by hospitals human resource officers.

After gathering required data, nursing force shortage and excess has been determined in studying hospital 16 different units dividing into occupational levels and estimated required nursing force. Data analysis has been done by Excel, descriptive statistic indexes and recommended Standards guidance by Health Ministry.

FINDINGS:

Studying hospital was educational – health care and public. Total counts of current nursing manpower and required counts based on recommended pattern of Health Ministry for studying hospital has been determined that its results are expressed in Table 1.

In Shariati Hospital there were 392 nursing organization jobs overall. Based on Health Ministry Standards, this hospital should have 794. From 16 studying units in Shariati Hospital based on Health Ministry recommended pattern, 4 units had excess in nursing force and the rest were on shortage. Based on this pattern the most shortage was in ICU (36 people) and the least one was in infants units (one person). Totally, distance of current situation from Health Ministry recommended pattern was 139 people (Tab 1).

Table 1: Staffing Situation in Shariati Hospital based on recommended pattern of Health ministry

Shariati Hospital	Units	Bed Occupancy Coefficient	Counts of active beds	Current nursing force	Nurse based on recommended pattern of Health ministry	distance of current situation from Health Ministry recommended pattern
	CCU	75.1	15	12	22	10
	ICU	76.8	31	61	97	36
	NICU	82.2	6	15	20	5
	Infants	12.5	8	9	10	1
	Orthopedic	60.7	36	25	33	8
	Internal Neurology	79.4	17	20	36	16
	General Surgery	71.4	40	20	36	16
	Emergency	80.8	33	45	52	7
	Kidney transplant	59.4	7	10	12	2
	Pulmonary	68.7	30	20	44	4
	bone marrow transplant	85.3	34	63	74	-9
	Neurosurgery	73.7	24	15	23	8
	Internal Hematology	94.6	24	34	30	-4
	Obstetrics and Gynecology	81.3	44	17	44	26
	Post CCU	80.5	7	7	5	-2
Nursing Office	-	-	19	11	-7	
Total	-	356	392	549	139	

DISCUSSION AND CONCLUSION:

Suitable policies and activities of human resource management can improve problems related to manpower, thereupon it upgrades staffing efficiency and thus organization function. It is thought that policies and activities of human resource management must be alignment health care goals so that can solve problems and consequences of manpower in health care system (19). Medical practitioners are from the most fundamental components of health service presenting manpower. Unique job features like in Medical occupations such as effect in health that is the most vital aspect of human life, make noticing planning and foresight essential in this field. Pay attention to manpower planning in health field has importance from two aspects. First, Staffing is a basic factor in service efficiency, second, much amounts of financial resources of health sector is spending to pay staffing wages (20). At the moment, Third World countries allocate about 60 – 80% of their health and treatment part to hospitals, while in industrial countries this ration is about 38% for hospital and the rest are for non-hospital health and treatment services. So in countries, calculating hospital personnel has become a great importance (21). Although production of profession staffing in health field in recent years was increasing, but it seems there's a lot of problems in their appropriate distribution in hospitals. It's necessary that in all countries like Iran, Promote equitable access and public to basic health service be considered of Health system reform goals that of course this requires providing profession, educated manpower and their appropriate distribution (22). Based on result from estimates in studying hospital and comparing it to current situation we find out that distribution of nursing force in different units of hospital isn't balanced and it doesn't follow the current standard. From 16 units of Shariati hospital, 12 units are lower and 4 units are upper than on Health Ministry recommended pattern for staffing. Check on nursing force in current study and comparing it to present research indicates nursing force shortage

in studying hospital. In Mostafae research in Tehran Medical Science University Hospitals, 85.1% of units were lower than standard, 5.31% were upper and 9.57% were matching Health Ministry nursing force standards (23). In ICU, where are in charge of endangered patients care, in both studying hospitals, nursing force shortage is observed. Also AbrishamKar in his Research claims ICU is facing nursing force shortage and doesn't have correct management and planning for staffing (24). Nursing office is another unit that it's staffing both from quantity and quality has a great importance since it efforts the duty of Monitor and control the activities of different wards of hospital. In studying hospitals, there weren't any from Health Ministry recommended pattern in counts of required forces at nursing office, in such a way that in Shariati Hospital from comparing to Health Ministry recommended pattern there were 8 extra people at nursing office. Results of this study show that studying hospitals are facing nursing force shortage and most of that is related to Shariati hospital with lack of 139 people. Planning for remedy the personnel deficiencies and bringing hospital units to personnel standards level and essential educating for unit's authorities relating to correct management and planning of unit s manpower cause to increase performance and efficiency of hospital activities (25).

However, the most important factors that can prevent from Implementation of strategies in manpower appropriate distribution in health care field especially in hospitals include: Inadequate capital and funding and its concentration on strategic and staff levels and inappropriate asset allocation to health care front line, lack of suitable information about patients, ineffective organizational structure like Lack of competence, skills and training among personnel, restrictive rules, loss of effective leaders and managers in low levels for doing change management and eventually Political decisions in the field of health care system and opinion differences in government trunk that disrupting deciding in

national level (26). Results of this study shows that profession staffing distribution in hospitals and units of studying hospitals don't follow any specific model in manpower management field in health field and its under influence of Instructions and circulars of the Ministry of Health more than everything. So it seems that Policy makers of treatment field in Tehran University of Medical Sciences should follow a specific model for planning in hospitals. These models can be prepared and edited by considering to conditions of each country and be performed as the case in hospitals. Thereupon it suggested that manpower planning model in country health system be edited and presented based on connection between model's component like information, care makers (physicians and other profession groups), service, education and policies, and by using feedbacks and overlaying of this circles together as components of a health care system.

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