



Short Communication

EVALUATING MANAGEMENT SKILLS OF HEAD NURSES OF ZAHEDAN MEDICAL SCIENCES UNIVERSITY TRAINING HOSPITALS BY 360 DEGREES METHOD

Shirzad Arian Mehr¹, Karim Zare^{2*}, Abbas Yazdanpanah³

1. Department of Healthcare Management, Fars Science and Research Branch, Islamic Azad University, Marvdasht, Iran
2. Department of Statistics, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran.
3. Department of Healthcare Management, Marvdasht Branch, Islamic Azad University, Marvdasht Iran.

*Corresponding author's Email: karim.zare@yahoo.com

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ABSTRACT

In traditional method of evaluating hospitals head nurses' capabilities like professionalism, communicational skill and interpersonal skill has been performed just by hospitals managers and without taking feedback from second level managers (supervisor, nursing manager), other practitioners, nurses or head nurse herself. The aim of performing this study is using 360 degrees evaluation in measuring capabilities like professionalism, communicational skill, clinical performance and patient care which was conducted based on the questionnaire translation to Persian language from physicians and surgeons college of Canada Alberta state. This cross-sectional study was performed on 48 head nurses of training hospitals of Zahedan Medical Sciences University who had one year or more precedent of ward management. 3 questionnaires with 5- degree Likert scale which have four domains were used and distributed among evaluators including nurses, hospital managers and hospital supervisors. Reliability, validity and accessibility, the relation between evaluators view and the difference in scores average was calculated. The findings of study showed that the questionnaire has high validity and it was 87%, 93%, 95% and 97% for supervisor, self-assessment, hospital managers and nurses respectively. The highest Spearman correlation showed a significant relation between hospital managers and supervisor (p -value= 0.05, r = 0.37). The score relating to nurses had average score 149.6 and standard deviation of 17.23, though repeated measurement showed significant difference in average score.

There is a real difference between evaluators view and this significant difference existed in domain of communicational skill, professionalism and patient care and the difference of better views of evaluators towards head nurses with high experience and service record was observed which could indicate promotion of head nurses skill. High reliability of the questionnaires shows that the Persian questionnaire reliability is confirmed and this tool could be useful for evaluating managing skills of hospitals head nurses. Though, other studies should be performed for other job courses for ward head nursing, so that the tool validity and reliability to be confirmed and then this method could be used instead of traditional methods.

Keywords: 360 degrees evaluating method, head nurses, managing skills evaluating, communicational skill evaluating.

INTRODUCTION

Professionalism in medicine has been existed since antiquity in Hippocratic Oath. Since the very beginning of history, in patient care the effort has been to provide better services for care consumer. In this respect, need to measuring

performance in medical training system in accurate and systematic form and based on modern and simple methods have become very critical in the last decade since it creates a new opportunity for learning.

Regarding this issue, a universal approach with evaluating and reinforcing medical personnel capability has been formed. Medical organizations in Canada, US and England have highly noticed nurses required competencies. Especially in response to this point that nurses have a weak performance and should promote.

Also, it is required that for safety of the patient care and especially for responding the patient and budget and insurance issues, evaluation to be performed. Though, possibly at first implementing such a method is stressful and along with preventions, but others views and criticisms could be very formative for performance modification.

It should be noticed that cultural and social factors are changing and they impact behaviours and believes. In other word, as much as these factors influence patients, nurses should be ready to adopt their performance based on them. For this, nurses should notice the occurred changes in attitudes, values and norms of the society among various groups of our country culture in health care.

When a training institute like faculties and universities aims to promote care quality of health system receivers, we need to have some standards based on our expectations and behavioral models, so that occupational capabilities and health services learning to be promoted that following it, one of professional responsibilities of medical sciences domain trainers is learners efficient evaluation, so that care gives responsiveness remains stable.

In traditional method, evaluating competencies like professionalism, communicational skill and interpersonal skill has become complete by the lecturer and assessment focus of nurses performance was performed by clinical competency instead of behavior competency while acquiring some views besides the lecturer evaluation could obtain a complete form of nurses performance in hospital wards in various settings.

Traditional evaluation has two limitations: the first reason is that evaluators couldn't directly observe head nurses, as they contact with the patient or the patient family. The second reason is that performance evaluators' assessment doesn't include views of ward nurses, the patient or the nurse self-assessment.

A high goal of hospitals is to measure capability and performance management of head nurses for maximizing responding and patients' treatment quality. There are

various tools and methods for this purpose. It is believed that head nurses competence has several dimensions and a tool solely won't be able to measure all its dimensions.

Multiple studies have been performed in the field of evaluating methods, but none has emphasized a special method and all have emphasized this necessity that at first , the organization goal and expectations from performance evaluation should be specified but among all of them, 360 degrees feedback or multisource feedback is the most prevalent source of evaluation and performance improvement and a comprehensive and effective method which addresses evaluation with quality management philosophy in training.

Though, 360 degrees evaluation may not be able to measure all capability aspects but it uses several supervisors and could be repeated to measure change in skill and behaviour.

The aim of 360 degrees evaluation is that evaluation process is improved and additional information for direct feedback and training is provided, if all head evaluators rank head nurses similarly, any type of additional information is obtained from evaluation results.

In medicine domain, first Accreditation Council for Graduate Medical Education (ACGME) since 1999 suggested using 360 degrees feedback in questionnaire format as an evaluation method and states using it for evaluating medical personnel skill in 6 main domains especially professionalism and interpersonal communicational skill.

Also, the Program Achievement Review physician (PAR) relating to physicians and surgeons college of Canada Call Garry university since 1996 was codified as a formative performance assessment method to provide a multidimensional view of performance through a structured feedback for nurses. These views are obtained from the nurses themselves, their colleagues, patients and peers.

In fact, in medical sciences, necessary information for 360 degrees feedback are provided through questionnaires which are complemented by the patients, medical colleagues and other physicians, psychiatrists, social workers and peers. In medicine, 360 degrees evaluation is especially suitable for assessing communicational skills, altruism and collaboration in performance and professionalism.

Wood et.al study (2004) in Wisconsin University using 360 degrees method on radiology assistants showed that this is a suitable and valid tool for assessing communicational skill and professionalism.

360 degrees evaluation about head nurses behavior and conduct provides different views but this method may offer the highest evaluation accuracy about the nurse behavior and conduct.

Violato et.al study (2008) in Canada on psychiatrists' assistants states that 360 degrees evaluation in medicine is used for individual promotion.

In Stark et.al study (2008) in New York, internal field assistants in outpatient shift by 360 degrees evaluation method were examined in respect of professionalism behavior and the results showed that using this tool improves the relief of feedback by faculty members and self-assessment.

In the study of Violato et.al (2008), it is stated that most nurses will use the feedback data for changes which create in them, for example feedback causes nurses to increase their explanations to patients, promote their handwritings and medical brochures, change their communicational strategies with colleagues and promote their social- mental skills. Also, it causes nurses to be informed about professional commitment, collaboration and communications.

Over time, in recent years some evolutions have been performed in method of learner training due to responding to the society, promoting the patient care and so on and various methods have been used like issue- based training, storied method, workgroup, workshop method and training method in clinical rounds that besides them evaluation methods have been changed too, since in traditional method, the assessment criteria of a nurse has been the patient recovery and pupil – professor relation is propounded . therefore, the necessity of change in traditional evaluation is significant (therefore, we observe that public effort has been made for changing training structure and evaluation in world level and then in the country policies and national document of medical sciences training evolution is examining and codifying.)

What is today necessary, is evaluating what learner is performing during real work and method of using and integrating the acquired knowledge in based and clinical

sciences in caring the patient. It is supposed that when professional capability of care provider is progressed, following that altogether the quality of healthcare improves.

Regarding the significance of this evaluation type, several sessions were held in Ministry of Health, Treatment and Medical Training for examining this important issue and necessity of using performance evaluation and especially 360 degrees was emphasized that such studies have not been performed in our country.

Nakhei et.al (2010) study in Kerman medical sciences university has conducted a pilot study on 360 degrees evaluation and its utilization in evaluating capabilities of Accreditation Council for Graduate Medical Education in which survey was done among surgery course assistants using questionnaire from assistants themselves, peers, nurses and patients and it was specified that this method has validity and reliability for evaluating assistants and it is applicable.

Therefore, performing 360 degrees evaluation in the state medical sciences university and medical faculty with high precedent and by considering implementation of health system evolution plan in the country is one of points which are emphasized and its performance necessity is quite sensible. Regarding the significance of issue, in this study, it is tried that general capability status of head nurses of hospital wards to be evaluated from view of the head nurses themselves, hospital managers, nurses and hospital supervisors and in respect of some domains like professionalism, communicational skill and interpersonal skill, clinical performance and patient care and training weaknesses and strengths in the university to be specified. since head nurses as experienced people and sometimes with work record in nursing domain could better be agent and reflector of learned skills and the results of such studies could be used by the university training assistance in future decision makings and also by hospitals managers and directors.

Regarding the increasing trend of clinical plans evaluating in medical faculties and non-similarity of an appropriate tool for measuring especially among postgraduates who have sometimes the experience of working in health system, the present survey study is performed for the first time in Zahedan Medical Sciences Universities using valid and reliable Persian translation of Call Gary university questionnaire- Canada which could obtain the present status

of capability and competencies of hospitals treatment wards head nurses in respect of strengths and weaknesses and their ability in view of various evaluators and in other studies examined factors effective on performing evaluation method, feedback and factors effective on it and curriculum analysis. Performing such a study with 360 degrees evaluation will help creating a suitable bed of head nurses capability and competency since no information is available from the present status of hospitals wards head nurses.

This method could be specially used for different treatment occupations and the obtained results, besides managers and directors, help the ward head nurse and people relating to them to have an accurate perception from their workplace and new training policies to be determined based on the evaluation results. The present study aims to examine the relation between views of head nurses, nurses, hospital managers and supervisors.

METHOD

This study is a descriptive cross sectional study which was performed in specific working and time section on head nurses for evaluating performance with 360 degrees method.

Research Population:

The study was conducted on all head nurses of various wards of Zahedan medical Sciences hospitals who were 48 persons. According to view of statistical counselor and preventing from views excess, each head nurse was assessed by three hospital managers, three peers, and three nurses and by themselves. Evaluators included the hospital manager and director with 12 persons that each manager and director gives his opinion about the hospital head nurses. Peers are 48 persons (supervisor and hospital matron) and nurses are 144 persons and each head nurse also completed self-assessing questionnaire.

The study inclusion conditions:

All head nurses who are working with 2-3 years record of ward managing in a ward were selected. The hospital managers and supervisors with the greatest cooperation time were also selected. About head nurses, also it was tried that head nurses who had been in a ward for more than one year to be selected and peers were determined based on the head nurses selection.

The study exclusion conditions:

Those head nurses who had one year or less record in a ward were omitted due to low experience, but due to the second propounded hypothesis and comparison between one year service record head nurses were examined with head nurses with more precedent. Patients were omitted from the study due to difference in culture and literacy level and unfamiliarity with the questionnaire completion. Head nurses demographic information has not been the basis of collecting information.

Sample content and sampling method

In this study, sampling has not been performed and for statistical population all head nurses of Zahedan medical sciences university hospitals who were 48 persons, were used. For each head nurse, 10 questionnaires (3 by the hospital manager, director and matron, 3 by nurse and 3 by supervisor and 1 self-assessment) were completed and the questionnaires were provided for evaluators without name and there was no need to mention the evaluator name.

For distributing the questionnaire to head nurses themselves, supervisors and nurses, head nurses shift schedule was referred to personally that the schedule was taken from supervisors of 4 hospitals of Ali ebn Abitaleb hospital, Khatamolanbia hospital, Bouali hospital and Baharan hospital and head nurse shift was referred to and the questionnaires after completion were collected in the same shift or next shift. Coordination was made for distributing the questionnaire to the hospital managers, director and supervisor and then by coordinating to head nursing offices, they were distributed and collected and the questionnaire return rate percent was high.

Instrumentation:

Medical colleague questionnaire was used for hospital managers. These questionnaires are tools which assess the head nurses traits which are confirmed by ACGME. The adjusted questionnaire includes two vertical and horizontal columns. In horizontal column the trait relating to head nurses capability are questioned and in vertical column the considered trait is measured. For turning qualitative trait to quantitative trait 5 degrees have been considered and if that trait is not recognizable in head nurse. The option "I am not able to evaluate" have brought. Before each question, the most score (always = 5) to the least score (never = 1) were used. Reliability of the inventory questions were

confirmed with experts view. Each measuring tool validity depends on its precision and stability. Calculating Cronbach alpha coefficient through SPSS software indicates the research tool validity and internal consistency, this means that the made instrument benefits from enough stability and its implementation with sufficient distance achieves one conclusion that in our study the questionnaire validity was confirmed higher than 80%.

Correlation coefficient of evaluators acquired total score average shows that there is only a significant linear relation and agreement between views of hospital manager and supervisor (p-value <0.05, r = 0.37) and there is no significant linear relation and agreement between views of other evaluators. While, a very weak and small linear relation and agreement is observed between views of supervisors and nurse with self-assessment and between

Table 1: Correlation coefficient matrix of total score acquired between evaluators view

Evaluators	Self-assessment	Peer	Faculty members	Nurse
self-assessment	1	-	-	-
supervisor	0.11	1	-	-
hospital manager	0.04	0.37*	1	-
nurse	0.20	0.07	0.14	1

Table 2: Correlation coefficient matrix of the acquired score between evaluators view in professionalism promotion domain

Evaluators	Self-assessment	Supervisor	Supervisor	Nurse
self-assessment	1	-	-	-
supervisor	0.14	1	-	-
hospital managers	- 0.03	0.21	1	-
nurse	0.07	0.06-	0.13	1

Table 3: Correlation coefficient matrix of the acquired score between evaluators' view in communicational skill domain

Evaluators	Self-assessment	Supervisor	Hospital managers	Nurse
self-assessment	1	-	-	-
supervisor	0.08	1	-	-
hospital managers	0.08	0.4*	1	-
nurse	0.14	0.08-	0.13	1

Table 4: Correlation coefficient matrix of the acquired score between evaluators view in clinical performance domain

Evaluators	Self-assessment	Supervisor	Hospital managers
self-assessment	1	-	-
supervisor	0.04	1	-
hospital managers	-0.07	0.32*	1

Table 5: Correlation coefficient matrix of the acquired score between evaluators' view in patient care domain

Evaluators	Self-assessment	Supervisor	Hospital managers
self-assessment	1	-	-
supervisor	0.12	1	-
hospital managers	0.05	0.2*	1

P-value<0.05

views of nurse with hospital manager which is not significant (table 3-4).

Correlation coefficient of evaluators acquired score average in professionalism promotion domain shows that there is no significant and linear relation and agreement in this domain between evaluators' views.

But a very weak and small linear relation and agreement is observed between views of supervisor with self-assessment and the hospital managers' views with peer and between hospital managers view with nurse which is not statistically significant (table 4-4).

Correlation coefficient of evaluators' acquired score in communicational skill domain shows that there is a significant linear relation between the hospital managers and supervisors view in this domain (p -value = 0.005, $r = 0.4$) and there is no significant linear relation between other evaluators view.

But, a very weak and small linear relation was observed between views of nurse with self-assessment and between views of nurse and hospital managers which is not statistically significant (table 5-4).

Correlation coefficient of evaluators acquired score average in clinical performance domain shows that there is a significant linear relation between views of hospital managers and supervisor (p -value = 0.02, $r = 0.33$) and there is no significant linear relation between views of other evaluators (table 6-4).

Correlation coefficient of the evaluators acquired score average in patient care domain shows that there is a significant linear relation between views of hospital managers and supervisor (p -value = 0.04, $r = 0.3$) and this relation doesn't exist between other views.

But a very weak and small linear relation is observed between supervisor views and self-assessment which is not statistically significant (table 7-4).

DISCUSSION

Training is required for supervisors and provides an opportunity for developing self-awareness, clinical skill knowledge, job sensitivity and capability of relation with cultural diversity. For this purpose, accreditation plan for some of American medical graduates, since 20000, considers 6 capabilities necessary for all medical personnel so that these six capabilities are common for training in all courses.

In this respect, 360 degrees evaluation is used as a part of quality promotion and further accreditation plans of nurses involved in various sectors and also their responsibilities and for this purpose, previous studies for using this method and creating questionnaire show that a valid and reliable questionnaire could be created.

Our study's findings showed that firstly there is a significant linear correlation and agreement between total scores of evaluation between supervisors and hospital managers which is consistent with Joushi et.al (2004) and Davis et.al (2002) study on supervisors of a hospital ward. This score agreement in fact shows scoring validity between evaluators. Secondly, there is no correlation and agreement between scores of other evaluators which is similar to studies of Oganimi et.al (2009), Chendler et.al (2010) and Davis et.al (2002) that no statistical correlation exist between views of nurses and hospital managers and self-assessment.

The study results show that for determining that correlation coefficient in which domain is significant, it was specified that there was a significant relation between views of supervisors and hospital managers in domains of communication skill, clinical performance and patient care and this relation didn't exist in professionalism domain, that in explaining this finding we can say that Violeto et.al study (2003) states that one group in 360 degrees evaluation is medical colleague. Hospital supervisors and their managers with clinical view, have almost similar cognition from head nurses and are able to recognize communicational skill, clinical performance and the nurse patient care skill but since they, themselves, should show professionalism in real setting, presumably they don't have sufficient familiarity with this standard and haven't been trained clearly in their profession training and couldn't exactly examine evaluators professionalism skill.

Then, in professionalism domain, evaluators need training since the results of Micher et.al study (2010) show that people who show unprofessional behavior during their profession training, show this same tendency in their next job. Therefore, exact evaluation of professionalism is very essential. Therefore, in summarizing the results of first hypothesis table, we can say that this hypothesis is not fully confirmed since a very weak and small relation existed between views of head nurse, nurse, supervisor and hospital managers, which was not significant.

CONCLUSIONS:

Synchronous to implementing national plans in the country like health system evolution plan, we can take steps for elevating professionalism and hospital forces ability and specialization level and so train competent managers even in hospital wards which prevents from wasting of ample designated resources for these plans.

In the present study, it was tried to measure for its administration in hospital levels and operation in university level by a new attitude with modern evaluation methods.

Since the rate of evaluators' acceptance and cooperation was considerable and assessment tool validity and reliability was confirmed, we can say that implementing this method could remove many complexities of evaluation and during its implementation faces many problems and this process to be started to become an essential measurement in performance assessment domain.

In later studies, we can evaluate by creating some questionnaires including other dimensions of behavior or use other modern evaluation methods besides assessing through questionnaire.

5- Regarding multidimensional approach of 360 degrees evaluation, it is suggested that in other evaluations, patients to be used as feedback resource.

6- It is suggested that if hospitals need evaluation during accreditation performance, this method questionnaires to be used.

7- The study scholars suggest that more work to be performed especially on professionalism domain and especial workshops to be held for all medical levels.

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