

Original Article

## Communication, Work Engagement and Caring Provision Differences between Nurses and Physicians

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### Abstract

**Introduction:** Communication constitutes an indispensable prerequisite not only for the function of health institutes, but for their efficiency as well. The lack of successful communication gives rise to delays, inefficiency, malfunctions, let alone conflict and tension in the workplace. In contrast, the benefits obtained by effective interaction are numerous, with an immediate impact on patients, healthcare professionals and the institute.

**Aim:** The determination of the level of communication, work engagement levels and caring provision between doctors and nurses.

**Methods:** 270 doctors and nurses (120 and 150 respectively) of two hospitals. Data collection was conducted using an anonymous questionnaire with demographics and Jefferson Scale of Attitudes toward Nurse-Physician Collaboration, Utrecht Work Engagement Scale (UWES) and Caring Behaviors Inventory (CBI-GR).

The Statistical package for the Social Science (SPSS, v.23) was utilized for the purpose of data processing.

**Results:** Age has been found to affect level of communication, though only in the doctors' sample. The level of professional commitment appears to be average for both professional groups and does not seem to be impacted by gender. Age and years of experience, on the contrary, have a positive effect on the level of professional commitment, but only as revealed in the doctors' sample.

**Conclusions:** Physician-nurse communication lies in fairly satisfactory levels while work engagement level of both professional groups is mediocre, which ought to be of concern of the management services. Profession group correlated significantly with both communication and caring with nurses to show higher mean levels than physicians.

**Keywords:** Communication, Jefferson Scale, work engagement, Caring Behavior Inventory.

### Introduction

The principal aim of healthcare institutions centers on the production and delivery of high-quality healthcare services with which they are obliged to provide their patients, in the quantity and form needed as well as at the precise moment needed. The achievement of this goal requires both a constant state of alertness on behalf of healthcare units, and active participation and collaboration on the part of the human resources who comprise them (Deltidou,

et al., 2000; Dikaios, et al., 1999). Optimal collaboration and team work between health professionals constitute principal factors for high-quality healthcare provision to patients (Fagin, 1992). Optimal cooperation however entails quality communication between health professionals, which is often challenged by a series of factors which may render it ineffective and problematic. The benefits which may result from creative interaction between medical and nursing personnel in a healthcare unit are

numerous and pertain to the patient, health professionals and the institute.

Many studies showcase the significance of communication in the workplace, as a poor communicative environment can potentially pose barriers to the safe delivery of patient care, the health and well-being of the staff as well as the general function of the institute to a great extent. In particular, consequences of chronic exposure to a non-supportive environment are the following: poor communication and hostility between colleagues creates anxiety, professional exhaustion, fatigue, reduced professional satisfaction (Aghamolaei, et al., 2012; Fallowfield et al., 1999), high rates of resignation, especially in the case of nurses (Milisen, et al., 2005). Various unfortunate events and medical errors, compromise quality of services due to poor communication, while poor communication has bad consequences for the institutes such as well delays in the delivery of care, increase in the length of hospitalization, hence of the cost (Dikaos, et al., 1999; Milisen, et al., 2005), and therefore inadequate address to the needs of society that may result in judicial battles between institute and patients (Fagin, 1992; Asghari, et al., 2005).

The factors appearing to be incriminated for the quality of communication and which have been recorded in global bibliography are as follows: a) The overlapping areas of responsibility, of the two professional groups, which favors competition b) The different view of the notion of collaboration-communication on behalf of both doctors and nurses. Doctors perceive the sense of collaboration only as the reception of structured information coming from the nurses, which will help them reach a specific decision, which will in turn be executed by nurses. Nurses on the other hand, perceive collaboration as some form of team work, developing it in a supportive environment (Hastie and Fahy, 2009) c) The insufficient number of nurses noted in almost all western healthcare systems due to reduced interest in the profession and the mass demands and difficulties in the work environment (Milisen, et al., 2005; Kingma, 2007; Moisoglou et al., 2014) d) The diverse levels of education and qualifications of nurses. It is a fact that a nurse holding a university degree is able to live up to the demands of his/her profession and interact with the doctor and the patient better e) Professional training discrepancies between doctors and nurses. The holistic approach, the

determination of the relation between the natural-biological, the psycho-social and the spiritual dimension of a person, aiming at his individualistic treatment approach, differentiates nurses from doctors who have been trained to be more concise with respect to the illness (Puntillo and Mcadam, 2006). In the O' Daniel and Rosenstein study (2008), a series of additional obstacles are mentioned, such as gender, nationality, differences in language and terminology (Rosenstein and O' Daniel, 2008).

Professional commitment offers gratification and is characterized by vigor, dedication and absorption (Schaufeli et al., 2002). Research findings advocate that when its levels are low, unpleasant ramifications emerge in health professionals, patients and the institute. According to research, demographics seem to affect professional commitment such as gender, age and years of experience (Hontake and Ariyoshi, 2016). Job resources and organizational characteristics (supportive environment, continuous training opportunity) also constitute factors impacting on professional commitment levels. Lastly, personal resources are included among the factors influencing professional commitment. Autonomy, self-confidence and other personal skills and competences are some of them (Baker and Demerouti, 2008). Fostering a high level of professional commitment might incur multiple benefits as well as constitute a genuine profit for institutes and employees alike.

**Aim:** The aim of this study is the assessment of the communication level, the level of professional commitment and the provision of care between doctors and nurses.

### **Material and Method**

This synchronical correlation study was conducted in a university hospital of 673-bed capacity in Northern Greece. Two professional groups were included in this study staff nurses (n=150) and physicians (n=120) using a convenience sampling method out of 498 medical and nursing staff.

**Instrument:** The data for the study were collected by using, Jefferson Scale of Attitudes toward Nurse-Physician Collaboration, Utrecht Work Engagement Scale (UWES) and Caring Behaviors Inventory (CBI-GR). Jefferson Scale of Attitudes toward Nurse-Physician Collaboration was developed by researchers at

Jefferson medical college, Philadelphia, Pennsylvania and consists of 15 statements, which were grouped under four subscales, i.e., shared education and teamwork (7 statements), caring versus curing (3 statements), nurses' autonomy (3 statements) and physicians' dominance (2 statements). Responses are given using a four-point Likert scale ranging from strongly agree (4) to strongly disagree (1). The two items identified as "physician's dominance" questions are reserved scored, with a higher factor score given to a lower numerical answer and vice versa. The higher the total scores on this scale, the more positive the respondent's attitude toward physician-nurse collaboration. A higher factor score on "physician's dominance" indicates a rejection of a totally dominant role by physicians in aspects of patient care. A higher factor on the "nurses' autonomy" dimension indicates more agreement with nurses' involvement in decisions about patient care and policy. A higher factor score on "share dedication and teamwork" indicates a great reorientation toward interdisciplinary education and interprofessional collaboration. Finally, a higher factor score on the "caring versus curing" dimension indicates a more positive view of nurses' contributions to psychosocial and educational aspects of patient care (El Sayed and Sleem, 2011; Hojat et al., 1999).

The Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2006) has been designed to measure work engagement according to the three dimensions described above. Vigor, dedication and absorption are assessed by six, five and six items respectively. This 17-item scale, known as UWES-17, has been validated and utilized extensively in a number of countries. Work engagement was measured using the UWES-17. The UWES-17 is a 17-item self-reporting questionnaire that includes three subscales: *vigor* (six items, e.g. 'I am bursting with energy in my work'), *dedication* (five items, e.g. 'My job inspires me'), and *absorption* (six items, e.g. 'I feel happy when I'm engrossed in my work'). All items were scored on a seven-point frequency rating scale ranging from 0 (*never*) to 6 (*every day*). International and national studies reveal Cronbach alpha coefficients for the three subscales ranging between .68 and .91 (Bruin et al., 2013)

Caring Behaviors Inventory (CBI) (Wang et al., 2015) has been designed to measure nurse caring. The CBI-GR is a 24-item, four-factor

scale that measures the perception of caring on a 6-point Likert scale, ranging from 1 = never to 6 = always (Papastavrou et al., 2011). The reliability of the questionnaire' internal consistency was tested with Cronbach  $\alpha = .89$ .

**Ethical considerations:** Following ethical guidelines, written permission was obtained by the author of the original instrument to proceed with the translation and utilization of the instrument for research purposes. Permission from the Scientific Council of the hospital's Board of Directors was granted. Written information about the study was given to all potential participants, and they were informed that completion of the questionnaire implied their consent for participation in the study. Those who agreed to participate in the study completed the demographic questionnaire. No names or any other identifiable information were collected.

**Data analysis:** The internal consistency of the questionnaire was assessed through Cronbach's  $\alpha$ , which was deemed quite satisfactory,  $\alpha = .89$ . Pearson correlation analysis was used for assessment of the inter-relationships among quantitative variables.

## Results

Out of the 270 participants, 44% were physicians and 56.6% were nurses. 36.3% were male and 63.7% female with most of physicians to be between 30 and 39 years of age (35.9%), and nurses between 40 and 49 (58.6%). 94.9% of doctors and 85.2% of nurses had no communication skills training (Table 1). While the level of communication between the two professional groups was found to be quite satisfactory (3.09 and 3.28 for physicians and nurses respectively), their professional commitment level lies marginally above the average. Mean value of nursing care was quite satisfactory with its value to reach 4.51 for physicians and 4.91 for nurses. Profession group correlated significantly with both communication and caring  $p=0.000$ . Mean values UWES was 4.11 for the physicians, whereas for the nurses it was 3.91 (Table 2). Gender, age and years of experience of physicians was found to correlate significantly with the three questionnaires and more specifically age of physicians was found to correlate statistically significant with communication and work engagement, physicians' years of service correlated with work engagement and gender with caring. (Table 3)

**Table 1: Demographic characteristics of the study subjects.**

Respondent Category	DOCTORS	NURSES
	44,44%	56,56%
<b>Gender</b>		
Male	60%	17.3%
Female	40%	82.70%
<b>Age</b>	39	43,09
<b>Level Of Education</b>		
Secondary	-	28,70%
Technological	-	68,6%
University Degree	100%	2,7%
<b>POSTGRADUATE/Phd</b>	15%	5.33%
<b>Years Of Work</b>	10.30	17.90
<b>Training In Communication</b>	5.10%	14.80%

**Table 2: Mean values of Nurse-Physician communication, Work Engagement and Caring Behavior Inventory**

	Physicians(n=120)		Nurses(n=150)		p-value
	MEAN	SD	MEAN	SD	
<b>Jefferson</b>	3.09	0.45	3.28	0.31	<b>0.000</b>
<b>UWES</b>	4.11	1.34	3.91	1.19	0.209
<b>CBI-GR</b>	4.51	0.84	4.91	0.66	<b>0.000</b>

Statistically significant at  $p < 0.05$

**Table 3: Correlation of Nurse-Physician communication, Work Engagement and Caring Behavior Inventory with demographics (n=270)**

	Jefferson		UWES		CBI-24	
	Physicians(n=120)	Nurses(n=150)	Physicians(n=120)	Nurses(n=150)	Physicians(n=120)	Nurses(n=150)
<b>demographics</b>						
Gender	0.827	0.526	0.269	0.639	<b>0.042</b>	0.079
Age	<b>0.037</b>	0.677	<b>0.050</b>	0.301	0.452	0.547
Work place (Hospital)	0.149	0.127	0.091	0.127	0.072	0.573
years of service	0.199	0.643	<b>0.015</b>	0.614	0.221	0.517
Communication skills	0.098	0.816	0.578	0.131	0.25	0.11

Statistically significant at  $p < 0.05$

## Discussion

The findings of this study showed that nurses had a positive attitude towards communication something that is similar to previous studies such as this of Yildirim et al., (2005) made in a sample of nurses in Turkey as well as another one conducted in a sample of medical surgical nurses in Egypt (El Sayed and Sleem, 2011). The same study in the sample of Egyptian nurses indicated that age and years of service of nurses do not appear to have any effect on communication, with those findings to be in agreement with the present study (El Sayed and Sleem, 2011). Older physicians interact with nurses better compared to their younger colleagues. Furthermore, as shown both in the present study and that of Wang et al., (2015), the medical personnel are eager to have courses related to physicians-nurses interdisciplinary relationship introduced in their curriculum, in order for them to be better trained and foster collaborative relationships (Wang et al., 2015). In various studies carried out in Greece by Hatzimanoli (2014) and Dimitriadou et al., (2008) regarding interdisciplinary collaboration between physicians and nurses, physicians reported to have good relationships with nurses and appear to trust and respect them, while simultaneously accept their opinion on patient treatment and decision management. Nurses on the other hand, consider having a good level of collaboration and communication with physicians, regardless of the hospital in which they are employed. Gender of physicians, do not impact on the level of communication with nurses, which is also the case in the present study, as opposed to age which once again appears to affect physicians' attitude. In conclusion, the analysis indicated that physician-nurse communication lies in fairly satisfactory levels while work engagement level of both professional groups are mediocre, which ought to be of concern of the management services. Profession group correlated significantly with both communication and caring with nurses to show higher mean levels than physicians.

**Study limitations:** Selection bias may be present because physicians who have a particular interest in Nurse-physician communication are more likely to have responded to the questionnaire. While this study focused on communication between nurses and physicians with regard to patient care, it is also important to take into

account the level of care and communication among other staff members involved.

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