

## Nurses and Emotional Intelligence: a Descriptive Study

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### ABSTRACT

**Background:** Emotional intelligence (EQ) in health institutions is a field presenting a particular interest, because this particular environment of workplace presents some traits that are not met elsewhere. Soul-destroying working conditions make it imperative to use and develop emotional skills for two main reasons: firstly in order to have a good work output and incidentally to protect the working staff from soul-destroying environment.

**Objectives:** The aim of this study was to measure the emotional intelligence of nurses working in Public Hospitals.

**Methods:** A specialised questionnaire was developed and subsequently given to 251 nurses working in Public Greek Hospitals. The questionnaire included 69 questions describing the following 7 dimensions of emotional intelligence: self-consciousness, self-adjustment, motivations of behaviour, social skills, awareness of another person's emotional state, humour, and critical thought. The answers were given based on the 4 point Likert scale (not at all - a little – quite enough – a lot). To process our data statistically, we used the SPSS 14.0 (Statistical Package for Social Sciences).

**Results:** Statistical analysis revealed that 50.5% of our nurses sample working in Public Hospitals allocate a satisfactory level of Emotional Intelligence (EQ), 29.2% presented high EQ and 20.4% allocate below the mediocre EQ.

**Conclusions:** Stressing environment of Health institutions imposes the development of emotional skills in order to achieve exceptional clinical performance and to protect nurses from this particular environment.

**Keywords:** Care, Emotional Intelligence, emotions, nursing

## Introduction

Emotional intelligence (EQ) in health institutions is a field presenting a particular interest, because this particular environment of workplace presents some traits that are not met elsewhere (Cadman & Brewer, 2001, Cherniss, 2002, Evans & Allen, 2002, Freshman & Rubino, 2002). The official definition of emotional intelligence quotes as: "a form of social intelligence that includes the ability to recognize our own emotions and emotions of others, to perceive between emotions and the use of information (that arises from emotions) so as to guide our thoughts and actions" (Goleman, 1995, Mayer & Salovey, 1997, Davies et al., 1998, Bar-On, 2000, Law, 2004, Murphy, 2006). In other words an individual allocates the ability to comprehend with precision his and others' emotions, thus being able to direct thoughts and actions (Goleman, 2000, Safran, 2006). Daily interactions concern colleagues with different specialities, often with overlapping duties, that face persons found by definition (as ill) in physical and psychological stress when working as a team or individually. Through literature, we conclude that relations between the two largest working teams in the hospital, that is to say doctors and nurses, pass through a phase of redefinition, a fact that increases intensity in work (Mohammadreza et al., 2002, Mohammadreza et al., 2003). Soul-destroying working conditions make it imperative to use and develop emotional skills for two main reasons: firstly in order to have a good work output and incidentally to protect the working staff from soul-destroying environment (Graham, 1999, Strickland, 2000).

In his book "The Emotional Intelligence at Work" Goleman reports the work of Williams and Sternberg who first developed the idea of a common intelligence indicator. In their classic study "Group Intelligence", the basic condition for exceptional performance is the good relation between members of the team. Those who are not socially skilful and cannot be coordinated with the feelings of others constitute a brake to the total effort, particularly if they miss abilities of resolving differences

and of effective communication (Druskat & Wilff, 2001, Code of Professional Conduct, 2002, Cherniss, 2007).

Emotional abilities that make groups distinguishable are:

- Awareness of another person's emotional state or interpersonal understanding
- Collaboration and single effort
- Open communication, attitude of explicit specifications and expectations and open confrontation of members of the group with low performance
- Tendency for improvement
- Self awareness, as evaluation of the strong and weak points of the group
- Initiative and convenient preparation to resolve the problems
- Self-confidence as a team
- Flexibility concerning the implementation of collective duties
- Conscience of the organization's situation in terms of perceiving the needs of other basic groups in the company and creative exploitation of resources that the organization has to offer:
- Affiliations with other groups (Druskat & Wilff, 2001, Code of Professional Conduct, 2002, Semple & Cable, 2003, Cherniss, 2007).

Emotional intelligence is found to develop throughout our life and climaxes between 40-50 years of age. In this age the persons are able to correspond better to the requirements and pressures of environment because:

- they are more independent in their thoughts and actions
- they have better perception of other's emotions
- they are socially more responsible
- they are more easily adapted
- they are taking into consideration all situations and resolve problems in a better way
- they face stress more effectively than the younger (Six Seconds' EQ Institute for Healthcare Leadership, 2007, Vitello-Cicciu, 2003).

## Method

### Study design

The purpose of this study was to measure the emotional intelligence of female and male nurses working in Public Hospitals. Two hundred and fifty one questionnaires were distributed in nurses working in three Public Hospitals from May 2007 until May 2008.

### Sample

The sample emanates from the reference population of Nurses who work in Public Athens Hospitals and Region of Adults and concretely from Nursing departments, laboratories, offices of education and administrative services of Hospitals. The determination of

the size sample in this particular study was determined by the following factors:

- Desirable precision level of results
- Available financial expense
- Available time margin
- Fluctuation of the population under this study
- The number and the type of variables that concern in the inquiring process (Williams, 1978).

An application and protocol were deponed in the corresponding scientific committees of Hospitals for approval. The sampling was deliberate and randomly chosen. The entry criteria in the group were the following:

- Workers in the Nursing Institution for more than a year

- Workers in any department of Hospital
- Workers holding at least a degree of a one-year study educational institution.

The exclusion criteria involve workers that have not completed their studies. The choice of this particular way of sampling was selected in order to avoid problems when recovering the sample. Nurses participated in this study under informed consent.

#### Data collection

Content development of the measurement tool was supported by an extensive literature and inquiring retrospection, by searching corresponding questionnaires (EQi of BarOn, ECI of Daniel Goleman and Jefferson Scale of Patient' s Perceptions of Physician Empathy) and by submitting the questionnaire to experts who were asked to annotate and modify parts of it.

The questionnaire included two parts: one to collect demographic elements and one for to collect elements regarding skills that the nursing personnel allocate. The answers were given based on the 4 points (by no means - little - enough - very) Likert scale.

Moreover, the questionnaire:

- is structured in such a way, so that it constitutes a suitable, complete and precise tool of justifying the aim and objectives of the research. It elicits answers concerning the research and not their general opinions.
- is simultaneously composed from simple but at the same time full in content, phrases and questions – and no elaborate verbal forms or complex conceptual manufactures.
- is unbiased, it does not prompt the questioned person towards one or other direction, but gives a possibility of choice of answers through a scale of four points (by no means – little – enough – a lot).

#### Data Management - Statistical analysis

Statistical data processing took place by using the SPSS 14 (Statistical Package for Social Sciences) statistical parcel for Windows. The methods used in the analysis are:

- Test research (pilot study) in a small sample
- Reliability evaluations of internal cohesion (internal consistency reliability) based on alfa factor (Cronbach ' s alpha coefficient).
- Descriptive statistics on demographic data
- Descriptive statistics of emotional intelligence categories

## Results

#### *Demographic characteristics*

84.9% were female and 15.1% were male, 66.5% were married, 28.3% bachelors, while 5.2% were divorced and widowers. Table 1 describes the basic characteristics of the nurses.

#### *Statistical analysis*

The reliability of the measurement tool to determine Nurses EQ is satisfactory and oscillates around 0.88 (Norusis, 1990).

Descriptive analysis of questions regarding the ' self awareness' axis showed that 2.6% do not recognize their emotions, 20.7% recognize them partially, 54.2% recognize them satisfactory while, 22.5% absolutely recognize their emotions, the repercussions and their results. 0.8% are not aware of their internal reserves, 8.8% are partially aware, 53.9% are satisfactorily aware, 34.3% are absolutely aware of their internal reserves, abilities and limits. 3% do not have self-confidence, 8.8% have low self-confidence, 53.9% have self-confidence in a satisfactory level while and 34.3% allocates high self-confidence.

With regard to axis ' self-adjustment', 27% cannot handle their disrupting emotions and impulses, 42% can partly handle them, 24.7% handle them quite well, while 6.3% handle them effectively. 15.8% do not take the responsibility for their personal progress, 9.7% partly take it, 35.2% takes the responsibility quite enough, 39.3% take it completely, maintaining at the same time their integrity of honesty. 28.4% of the asked present a satisfactory flexibility in handling changes and are open in pioneering ideas, approaches and new information contrary to 19.2%

who present weakness in the way that they face the facts and search of new ideas. The remainder 52.4% handle multiple requirements, change of priorities and generally fast changes well.

With regard to axis ' motives of behaviour', 24.7% try to improve themselves ultimately or to correspond in certain perfection data, 47.2% try a lot while, 28.1% do not learn how to improves their record. 37.1% fully carry out the objectives of the Association, 59% carry them out to a large extent while, 4% do not energetically seek occasions in order to achieve the mission of the group. 33.1% present absolute readiness to act as soon as an occasion comes up, 50.2% satisfactory seek objectives beyond those that others impose to them or expect from them while, 16.7% do not neglect bureaucracy and rules so that work could be done quicker. 20.5% insist on achieving objectives despite obstacles and misadventures, 36.5% insist partly while, 43% function more on fear of failure and least on the base of hope for success.

With regard to axis ' Awareness of another person's emotional state', 80.5% satisfactory comprehend emotions and opinions of the patients and show active interest to their concerns contrary to 19.5% that do not conceive the emotional signals of patients and do not allocate the dexterity of listening. 92.6% forecast and recognize the needs of patients that they satisfy while, 7.4% do not seek ways to satisfy the patients and thus gain their devotion. 92% support that they sense the patients' needs in order to be developed and strengthen their possibilities while 8% do not recognize other's

achievements. 18.3% fully recognizes emotional tendencies of the health group and it contribute in strengthening relations, 50.2% recognize them partly while, 31.5% are unable to understand forces that shape patients' opinions and movements.

With regard to axis `social skills', 65.7% allocates the required skills in order to gain other's trust while, 34.3% it do not use effective methods of persuasion. 59% communicate well, 26.7% allocate the ability of good listening, seeking mutual understanding willingly accept to share information with others while, 14.3% do not encourage open communication. 75.7% support that they allocate inspiration and can guide groups and persons while, 24.3% cannot take initiatives and do not act as leaders irrelevantly from their rank. 21.5% are advocates of change and recruit others to their objective, 54.6% provokes partly the system to admit the need of change while, 23.9% do not recognize the need of change. 8.4% are strongly capable to handle with diplomacy stringent individuals and situations of intensity, 73.7% can partially negotiate and solve disagreements while, 17.9% cannot detect the probability of conflicts and do not care for disagreement de-escalation. 53.8% create bonds and it have good and continuous communication with others, 43.4% knits up partially with friends and maintain personal friendships with colleagues and collaborators while, 2.8% grow minimal functional relations. 48.2% allocate group skills and cultivate a sense of identity within the group, 49.4% partially contribute in creating cohesion within the group in order to achieve objectives while, 2.4% are keen to collectiveness. With regard to axis `humour', 32.1% support that have a sense of it and use it daily in order to be flexible, 49.2% have a sense of humour that do not always use while, 18.7% have a little or no humour.

With regard to axis `thought', 25.3% of the asked support that they use their capabilities so that they can copes with the work challenges, 55.7% use the critical thought but not on a daily basis while, 19% allocate a little up to no critical thought.

## Discussion

The present study revealed that half of those participating recognize and sublimely manage their internal situation, preferences, personal reserves and have the emotional tendencies that lead to achievement of objectives. Half of the participants report that they have good self awareness and enough motives of behaviour; moreover they allocate humour used selectively and they use the critical thought but not on a daily base.

Recognition of emotions and thus satisfaction of patients' needs is achieved only through the ability of health professionals to initially recognize their own emotions and needs. In the present study, roughly 70% of the participants reported that they recognize their emotions. Researches have shown that Head Nurses, who allocate

**Table 1 Demographic characteristics**

| Age                           | %    |
|-------------------------------|------|
| 20-30                         | 20.7 |
| 31-40                         | 47.8 |
| 41-50                         | 27.5 |
| >51                           | 4.0  |
| <i>Educational status</i>     |      |
| Higher Education Institutions | 3.6  |
| Polytechnic colleges          | 53.8 |
| Postgraduate title            | 3.2  |
| PhD                           | 2.0  |
| Speciality                    | 23.0 |
| One year lasting              | 1.6  |
| Biennial lasting              | 12.4 |
| <i>Place ob birth</i>         |      |
| Crete                         | 39.4 |
| Stereia Hellas                | 15.5 |
| Peloponnese                   | 9.6  |
| Thessaly                      | 9.2  |
| Epirus                        | 8.0  |
| Macedonia                     | 8.8  |
| Thrace                        | 1.2  |
| Islands                       | 6.4  |
| Cyprus                        | 1.6  |
| Russia                        | 0.4  |
| <i>Department of work</i>     |      |
| Clinic                        | 39.8 |
| ICU                           | 24.3 |
| Surgery                       | 12.8 |
| Laboratory                    | 8.8  |
| Office                        | 5.6  |
| Emergency                     | 8.8  |
| <i>Foreigner languages</i>    |      |
| One (l)                       | 62.2 |
| >2                            | 18.3 |
| None                          | 19.5 |

emotional intelligence in a satisfactory degree, precisely conceive their emotions as well as others' and thus, they are differentiated by those expressing false emotions. For example, they can distinguish anger of Nurses related to decision-making and manage it in such a way as to restore Nurses in the initial objective, that is to say, the care of patient. Besides, they are able to comprehend complex emotions of relatives and of health personnel that accompany cases of dying patients (Vitello – Cicciu, 2002, Caruso et al., 2002).

The soul-destroying environment of Health institutions imposes the growth of emotional skills on one side for exceptional clinical performance and on the other side for protection of the worker from this particular

environment. In this study a large percentage of participants cannot handle rightly their impulses and their disrupting emotions and this results in a malfunctioning group with regard to the care of patient. At the same time it was found that, while Nurses align themselves absolutely with the objectives of Nursing Institution, however they are distinguished by a disposal for personal evolution. We mark that groups in workplaces fall into three levels of performance. In the worst case, frictions within the group can lead to failure, resulting in a performance lower from the mean of individuals. When groups function well enough, the grades are higher than the mean of its members. However, when a true collaboration exists within the group, its grades exceed by far even the grades of the best individual. When groups function at their outmost, the results could be more than cumulative, they can be multiplicative as the most important talents of an individual push forward the most important talents of a next individual, producing more results than a sole individual. When the members of a group give their best the results are not anymore cumulative but multiplicative, because talents and abilities of all members are used (Goleman, 2000).

Awareness of another person's emotional state is an essential component of medical and nursing care. The present study showed that Nurses comprehend satisfactory the emotions and opinions of patients. Similar results resulted when in a research the subject of awareness of another person's emotional state was approached, evaluating the answers from medical and nursing personnel and from Nursing and Obstetrics students. The same study showed that men and women equally comprehend the needs and problems of patients. 28 However patients participating in other study and suffering from chronic respiratory deficiency had a contradictious opinion. Therefore, when they were asked to determine the sectors of care that medical and nursing personnel should improve, the majority of their answers were focused in biggest emotional understanding (Papageorgiou, 2006).

As far as social skills are concerned (or social influence), in this study we found that Nurses influence the environment with persuasiveness and inspiration, partly recognize the need for change and promote the

collectiveness and collaboration.. An older study showed that the human brain is related with the growth of social skills, as it can create new nervous webs and nervous connections throughout adult life that 'fight' against rooted patterns already existing in the brain (Goleman & Boyatzis, 2008).

Humour is the ability of an individual to see the funny side of every situation instead of remaining serious all the time. In this study the necessity of using humour was stressed. A large percentage uses it selectively among members of personnel or with the patients. Research that has become has shown that the use of humour contributes in intellectual prosperity of individuals, minimising the effect of negative situations and protecting the individual from everyday difficulties (Ojanen, 1996). In another study, it appeared that everyday use of good humour helped Nurses to satisfy the needs of patients even more (Astedt – Kurki & Isola, 2001).

Deductively, analysis of results showed that 50.5% of the Nurses sample working in Public Hospitals allocate a satisfactory indicator of Emotional Intelligence (EQ), 29.2% have high EQ and the following 20.4% allocates below mediocre EQ.

### Limitations

In this study certain limitations exist which should be taken into consideration for a better process and generalisation of results. The size of nurses sample could be considered small as far as reliability of measurement is concerned, as it constituted an indicative sample from the total nurses population that work in public hospitals at the time the research took place. A second restriction is that the results of this study reflect the opinions of nurses from only three hospitals of the country without essentially reflecting opinions of the total number of nurses that work in public hospitals all over Greece. Given the variety of health professionals who function under the umbrella of administering care in Hospitals, the fact that personnel participating in the present study constituted only by nurses, is perhaps a third restriction in generalisation of results. The comparison of opinions about emotional intelligence of nurses who work in public civil and military hospitals of Greece would be particularly interesting.

## Conclusions

Emotional intelligence is a basic factor of success. It results and develops when a person undertakes the complete responsibility of his/her behaviour, his/her reaction on different events, of his/her thoughts and emotions.

Taking into consideration the restrictions above, a similar study with a bigger sample of nurses, and particularly from a more representative breadth of national hospitals, could also lead to larger generalisation and validity of results.

## REFERENCES

- Astedt – Kurki, P., Isola, A., 2001. Humour between nurse and patient, and among staff: analysis of nurses' diaries. *Journal of Advanced Nursing* 35 (3), 452 – 458.
- Bar –On, R., 2000. Emotional and Social intelligence: insights from the emotion quotient inventory. In: Bar – On R. and Parker J. *The handbook of Emotional Intelligence*. Jossey –Bass, San Francisco, pp. 363-388.
- Cadman, C., Brewer, J., 2001. Emotional intelligence: a vital prerequisite for recruitment in nursing. *Journal of Nursing Management* 9 (6), 321-324.
- Caruso, DR, Mayer, JD, Salovey P., 2002. Emotional intelligence and emotional leadership. In Riggio R. and Murphy S. eds. *Multiple intelligences and leadership*. NJ: Lawrence Erlbaum Assoc., Mahwah, pp. 55-74.
- Cherniss, C., 2002. Emotional intelligence and the good community. *American Journal of Community Psychology* 30 (1), 1-11.
- Cherniss, C. Emotional Intelligence: What it is and Why it Matters, [cherniss@rci.rutgers.edu](mailto:cherniss@rci.rutgers.edu) [www.eiconsortium.org](http://www.eiconsortium.org) Paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, New Orleans, LA, April 15, 2000 accessed 10/3/2007
- Davies, M., Stankov, L., Roberts RD., 1998. Emotional intelligence: in search of an elusive construct. *J Pers Soc Psychol* 75, 989-1015.
- Druskat, VU., Wilff, S.B., 2001. Building the emotional intelligence of groups. *Harvard Business Review* 79 (3), 80-90.
- Evans, D., Allen, H., 2002. Emotional intelligence: its role in training. *Nursing Times* 98 (27), 41-42.
- Freshman, B., Rubino, L., 2002. Emotional intelligence: a core competency for health care administrators. *Health Care Management* 20 (4), 1-9.
- Goleman, DP., 1995. *Emotional Intelligence: Why it can matter more than IQ for character, health and lifelong achievement*. NY: Bantam Books, New York.
- Goleman, DP., 2000. Η Συναισθηματική Νοημοσύνη στο Χώρο της Εργασίας. *ΕΛΛΗΝΙΚΑ ΓΡΑΜΜΑΤΑ*, 1Γ έκδοση, ΑΘΗΝΑ.
- Goleman, D., Boyatzis, R., 2008. Social intelligence and the biology of leadership. *Harv Bus Rev* 86 (9), 74-81, 136.
- Graham, IW., 1999. Reflective narrative and dementia care. *Journal of Clinical Nursing* 8 (6), 675 – 683.
- Hojat Mohammadreza et al: "Physician Empathy: Definition, Components, Measurement, and Relationship to Gender and Specialty". *American Journal Psychiatry* 159:1563-1569, September 2002
- Hojat Mohammadreza, Fields, Sylvia K, Gonnella, Joseph S: "Empathy: An NP/MD comparison", *Nurse Practitioner*, Apr 2003 [http://www.findarticles.com/p/articles/mi\\_qa3958/is\\_200304/ai\\_n9197452](http://www.findarticles.com/p/articles/mi_qa3958/is_200304/ai_n9197452) accessed 1/3/2007
- Kliszcc, J., Nowicka – Sauer, K., Trzeciak, B., Nowak, P., Sadowska, A., 2006. Empathy in health care providers – validation study of the Polish version of the Jefferson Scale of Empathy. *Adv Med Sci* 51, 219 – 225.
- Law, KS., Wong, CS., Song, L., 2004. The construct and criterion validity of emotional intelligence and its potential utility for management studies. *J Appl Psychol* 89, 483-496.
- Mayer, JD., Salovey, P., 1997. What is emotional intelligence? In: Salovey P and Sluyter D. *Emotional development and emotional intelligence: educational implications*. Basic Books, New York, pp. 3-31.
- Murphy, KR., 2006. *A critique of Emotional Intelligence*. NJ: Lawrence Erlbaum Associates, Mahwah.
- Norusis, MJ., 1990. *SPSS Base System User's Guide*. Illinois: SPSS Inc, Chicago.
- Nursing and Midwifery Council., 2002. *Code of Professional Conduct*. London.
- Ojanen, M., 1996. What is a 'self'? The structure, development, disturbances and integration of 'self'. Kirjatoimi, Tampere.
- Papageorgiou, DE., 2006. Comparison of respiratory patients' and health professionals' perceptions about the level of care provided in Intensive Care Unit. *Nosileftiki* 45(4), 527-535.
- Safran, D, Miller, W, Beckman, H., 2006. "Organizational Dimensions of Relationship-centered Care". *Journal of General Internal Medicine* 21(S1), 9-15.
- Semple, M., Cable, S., 2003. The new code of professional conduct. *Nursing Standard* 17 (23), 40-48.
- Six Seconds' EQ Institute for Healthcare Leadership: Reduce Nurse turnover with research based emotional intelligence ©2004 Six Seconds - All Rights Reserved Updated: 6/26/04: [www.healtheq.com/problem.php](http://www.healtheq.com/problem.php), accessed 5/3/2007
- Strickland, D., 2000. Emotional intelligence: the most potent factor in the success equation. *Journal of Nursing Administration* 30 (3), 112-127.
- Vitello – Cicciu, J., 2002. Exploring emotional intelligence. *JONA* 32 (4), 203 – 210.
- Vitello-Cicciu, J., 2003. "Innovative leadership through emotional intelligence". *Nursing Management* 34(10), 28-33.
- Williams, WH., 1978. *A sampler on sampling*. John Wiley, New York.