

## Investigation of Nurses' Job Stress and Job Satisfaction. The Case of Hemodialysis Units - a Brief Literature Review

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**Objective:** The nursing staff has especially important roles and its contribution to the hospitals' efficiency is enormous. The job satisfaction of the nursing personnel has been in the last decades an object of study in the international literature. The goal of the present study was to review the existing literature on nurses' job satisfaction in the hemodialysis unit

**Plan & Review methods:** MEDLINE data base was searched using hemodialysis, nurse, job satisfaction, burn out" as entry words .The existing literature in Greek language was also searched. Dissertations in Greek and books were searched as well.

**Results:** According to the literature, overall low job satisfaction is traced in nurses and hemodialysis units are no exception to this. The main reason, as it is concluded from international studies is the conditions for practicing nursing; these are related much less to the nature of the work, and much more to organizational issues which reflect the structure and the problems of the health systems.

**Conclusions:** The job satisfaction is a high priority issue that the nursing institutions around the world must deal with carefully. In regard to the Greek field, more surveys are required in order to examine in depth which factors and to what extent define the nurses' job satisfaction in our country.

**Key words:** job satisfaction, professional burn out, nurse, hemodialysis unit

### I. Introduction

The term "job satisfaction" refers to viewing the workers' feelings both in relation to their job as a whole, and to some of its aspects. It is the degree to which the workers are both pleased (and therefore satisfied) or not pleased (and therefore dissatisfied). The job satisfaction has been examined in the last decades in many theoretical and empirical articles and publications, due to its economical, humanistic and generally theoretical interest. Close attention has been paid to the factors which form it and its effects.

Despite the rapid technological progress made in all fields, the human factor continues to be the most important one for an organization to achieve its goals. It is commonly accepted that each organization's human resources has great value and its contribution to accomplishing its objectives and purposes is decisive. (Shader 2001, Staiger; 2000)

The same applies for each country's health organizations and its health system in general. The nursing staff has especially important roles and its contribution to the hospitals' efficiency is enormous. However, in order for that staff to be effective it has to be chosen appropriately, placed in effective organizational structures and be satisfied both by their job in general, and each of its dimensions. (Lu 2005).

The shortage of nursing staff, the increase of the needs of the health care services in a rate larger than their staffing,

and also the cost both in time and money to hire initially or replace the nursing personnel, create the need for the already existing personnel to practice their duties effectively and efficiently. (Buchan 1994, Buchan 2002)

The job satisfaction of the nursing personnel has been in the last decades an object of study in the international literature.

In the last decades, the interest for measuring the job satisfaction of the nursing staff is focused on the people working in hospitals, because the latter are places where people work hard and experience discontent (Charalampidou 1996), whereas in some of their specific departments, such as the intensive care units (ICU), the hemodialysis units and the emergency room, the personnel experience increased stress and there are increased needs for care provision. (Cooper C & Cartwright, 1994, Tselebis 2006, Li 2008). The extensive study of the factors related to the professional satisfaction of the nursing employees is expected to help improve the conditions for practicing their work and the provided quality of care.

#### I. a. Plan & review methods

In regard to method and data sources, a general approach was first made on the topic of job satisfaction.

MEDLINE data base was searched using "hemodialysis, nurse, job satisfaction, burn out" as entry words. Then internet addresses relevant to the topic were traced. The existing literature in Greek language was also searched. Dissertations in Greek and books were searched as well.

### 1. b. Results

One reference in Greek (1 dissertation) and one internet site in English were used. As for the rest of English

literature, 44 articles, published between 1978 and 2008 were used. According to the literature, overall low job satisfaction is traced in nurses and hemodialysis units are no exception to this. The main reason, as it is concluded from various researches in our country and other countries, is the conditions for practicing nursing; these are related much less to the nature of the work, and much more to organizational issues which reflect the structure and the problems of the health systems.

## 2. Factors affecting job satisfaction in the registered nurse

The factors that contribute to the job satisfaction are divided in three large categories:

- a) the individual/personal
- b) the organizational and
- c) the work ones.

In a meta- analysis of 48 studies regarding the nursing staff's job satisfaction, Blegen (1987) defined 4 personal and 9 organizational factors contributing to job satisfaction. The personal factors include age, education/training, professionalism and experience. In regard to the organizational factors the stress had a negative correlation, whereas autonomy/independence, work acknowledgement, the communication with the coworkers and the sense of justice presented a positive correlation with job satisfaction.

The work factors affecting the nursing staff's job satisfaction are the work load (patients-health staff ratio), the composition of the personnel and the critical condition of the patients. High critical patient condition in combination with the changes in the structure of health work is related unfavorably to the work load and the quality of care. In addition, the composition of the nursing personnel (a small graduate nurses – assistant nurses ratio) and the increased patients-nurses ratio contribute significantly to the nurses' discontent, the clinical results and the quality of care (Best and Thurston, 2004).

The importance of the factors which contribute to the nurses' job satisfaction varies. Even though the nurses' fee continues to be a component in the measurable scales of job satisfaction, it contributes very little to that, according to Blegen & Mueller (1987) and Cavanagh (1990). After the end of World War II Mayo (1945) claimed that the determinative factor on job satisfaction lies in the work group interaction, emphasizing on good leadership and the pleasant intrapersonal relationships in the workplace. The administrative methods and leadership both on hospital level and on hospital wing level affect the job satisfaction of the nursing staff, as well as their behavior which can be expressed through health complaints, absences and other indicators of good or poor status (Boumans & Landerweerd 1993, McNeese Smith 1993, Morrison et al. 1997). Where there is good communication and the nurses enjoy a nice environment that supports them, and at the same time they work well together, then the job satisfaction and innovation are in fact enforced (Adams & Bond, 1995). In the opposite case, the nurses experience high levels of stress which lead

to depression, hostility, negative emotions and low job satisfaction and also reduced performance by the organization and the hospital wing (Wheeler & Riding, 1994).

Additionally, very important is the nurses' independence/autonomy and the capability to take on initiatives. In fact, the greater the freedom for decisions is in clinical terms, the greater the nurses' job satisfaction is. Moreover, the work load has a large (negative) correlation to job satisfaction (Aiken et al. 2002) since it is also related negatively to autonomy and low quality of care.

According to a research by the Health Care Advisory Board (2001, it has been pointed out that the nurses' turnover rate ranges internationally on a 15% percentage. Similarly, Khowaja & Nensey (1999) reported that the turnover rate in The Aga Khan University Hospital, Karachi, Pakistan were 33.6% in 1996-1997. It appears that what stands is that the smaller the cohesion is in the nursing group, and the larger the stress is, the smaller the job satisfaction is and the larger the turnover risk is.

Peterson (2001) reported that there are a number of factors that influence the lack of nurses such as hiring, keeping the staff through motives, etc. The improvement of the job satisfaction results not only in the decrease of turnovers/departures but also in the improvement of the patient's satisfaction. Aiken et al. (2002) reported that the nurses' job satisfaction and the professional exhaustion are responsible for the lack of staff and also the quality of the nursing care. That means that a significant amount of dissatisfied nurses is a decisive factor in the patients' dissatisfaction.

Along with the job dissatisfaction, which is expressed mainly through work turnover, the nurses experience the phenomenon of the "virtual absence" which refers to them being physically present and mentally and psychologically absent mainly due to a lack of motive.

The lack in numbers of nursing staff is also a problem in other countries as well (Buchan, 1994). That lack is combined with various factors which also include demographic changes. Therefore, along with the aging population, the number of active nurses is decreased and the number of people in need of hospital care is increased, because the number of older people suffering from chronic illnesses is increased. Other factors include low payment and poor working conditions, which discourage young people from choosing the nursing profession. (Buchan, 1994).

On an organizational level, a significant factor contributing to the lack of nurses is turnovers, which are consequently enhanced by the job absence of the staff. Furthermore, the high percentage of turnover and absences result in a high cost and low levels of quality of the provided nursing care and therefore poor productivity and efficiency (Severinson, 2001). In addition, in that way the pressure on the remaining employees is increased which results in the professional exhaustion and the further amplification of early retirement and resignation phenomenon (Borda, Norman, 1997).

### 2. a. Organizational limitations

There are some situations inside the workplace which are directly involved in the workers' performance, and consequently are affecting it. These are characterized as "organizational limitations". These limitations come from various work components, including the coworkers and the natural working environment, as we can see below. Peters, O' Connor & Gordon (1978) developed a classification of the limitations in the 8 below areas:

1. Necessary information in relation to the work
2. Working tools and equipment
3. Material and supplies
4. Financial support
5. Preparation for executing the work (job position)
6. Time availability
7. Working environment
8. Help from third parties

### 2. b. Family-Job Conflict

The family-job conflict arises when the demands by the family and the demands by the job get in each other's way. The problem concerns everyone who has a family but mostly the families with both members working and that have children and also one-parent families. Nevertheless, the conflict is more likely when the children are sick and when the school activities demand parent participation, whereas the same conflict affects differently women and men, because women deal mainly with raising the children.

The job-family conflict has been found to be related to job satisfaction. Specifically, various researchers report that the workers who experience high levels of conflict report low levels of job satisfaction. According to Parasuraman, Grenhaus & Granrose (1992), in men (but not in women), the conflict was particularly related to job satisfaction. In regards to men, the conflict was correlated negatively (correlation coefficient) to job satisfaction by -0.40 whereas that correlation was only -0.02 for working women.

### 2. c. Fees

Rice, Phillips & McFarlin (1990) reported a positive correlation between the fee level and the job satisfaction in a sample of mental health professionals who had the same job description. The employees most likely compare their fee with that of the rest and are very dissatisfied if they find out differences among people with the same job. More important effect than the payroll differences has the process from which the fees come

from. If these are fair, even if they lead to payroll differences, they have a larger effect on job satisfaction than the fee itself (Rice R.W., Phillips S.M. & McFarlin)

### 2. d. Work stress

The stressful situations created in the workplace combined with personal life factors, increase our total psychological load, and also the risk of heart conditions or abuses. The professional stress is often an object of study, sine it is an important factor of every person's work. Stress can affect the mental and physical health of the person thus decreasing his performance in the workplace.

The main factors that cause stress to nurses are the regular shifts, the role conflicts, the constant communication with a variety of people, the work load, and the heaviness of the cases, as well as, depending on their work field, dealing with death on a daily basis. Moreover, they have to deal with family issues due to their job, thus experiencing more stress, which is then transferred to their workplace (Cooper & Cartwright 1994, Brokalaki 2001, Kluger 2008).

### 2. e. Work load

The work load is defined as the work demands for the workers. It has been found to be correlated negatively to job satisfaction. Karasek, Gardell & Lindell (1987) found that work load was negatively correlated to job satisfaction and positively to heart conditions. In fact, special tools have been created (questionnaires to measure work load). (Karasek, 2007)

### 2. f. Working hours

The most commonly applied working hours are 8 hours a day for 5 days a week. However, due to organizational needs for more work non stable working hours have been adopted, such as flexible hours, long-hour shifts, night shifts and part time hours (Barton, 1994). In the health field the long-hour shifts, the rotating working hours and the night shifts are common.

The hospitals belong to organizations functioning 24 hours a day. The term long-hour shifts refers to working beyond 8 hours a day. The necessity, on many cases, for 16 hours work in one day by the nurses is a common and stressful issue for all nurses, and especially the ones who have a family (West et al. 2007, Lee et al. 2004). Therefore, two or three shifts are required in order to cover the 24 hours of the day. Many workers are also working rotating hours on morning, evening and night shifts. The larger issue that arises from the rotating hours is the disturbance in the cycle of sleep which disturbs the circadian/diurnal rhythm and therefore brings change both on the body temperature and the hormonal levels of the blood. All of these can lead to health problems (Viswanathan, 2007).

### 2. g. Professional burn out

As it is already shown by preexisting research, the nurses have a large share of professional burn out among other professionals, which is combined with the increased work load and duties. Most nurses usually start out expecting

poor working conditions: long queues of waiting patients, time pressure, dealing daily with pain and death, which result in not having a positive stance, which eventually amplifies the pressure. On the contrary, the sense of

offering, the appreciation to others, the reciprocity and reward relationships, the challenge and variety relieve the pressure on their work (Hart & Rotem 1995, Stapleton et al., 2007).

### 3. Nurses' job satisfaction in the hemodialysis unit

The hemodialysis unit is not an exception to the issues related to the nurses' job satisfaction. Even though there are not many emergency cases, the chronic character of the condition and the profile of patients with heavy conditions, the risk of infectious diseases and the job routine are distinctive features of the field that affect job satisfaction (Bryson 2005, Sabo 2006). The lack of nurses, the work load, the stressful working environment, and the demands of the nursing care itself, which has to do with elder people and on hemodialysis, are predictors-indicators of the job satisfaction (Murphy 2004, Gardner et al., 2007, Cowin & Jacobson 2003).

It has been found that the nurses' clinical supervision and guidance can increase their job satisfaction and contribute, as possible, to the full completion of their work (Bryson 2005). Both the external factors and the nature of their work, contribute to the increased stress levels of the nurses in the hemodialysis unit along with the nurses' defense mechanisms and the relationships among the nurses (Murphy 2004). Nursing staff rates the business of the unit as the maximum stress and states that they felt this high level of stress on a daily basis. The most notable stressor for the staff related to patient behaviour. (Dermody & Bennett , 2008). In addition, on any case that requires high level of team work, the relationships between the members of the team play a very important role, both in achieving the ultimate goal, and satisfying every member of the team. Moreover, the positive feedback of nurses, from patients and colleagues contributes to the improvement of the provided care (Olthuis et al., 2007).

Survey data shows that most of the personnel does not receive counselling about uncertainties, expectations does not correspond to reality and there is distrust and scarcity of involvement. These elements appear to cause irritation and dissatisfaction and if not resolved are responsible, together with technical and environmental factors, for the serious burn-out syndrome in the personnel of dialysis units. (Di Iorio et al, 2008)

Especially for Greece, less than 50% of the nurses in the hemodialysis unit report that they are satisfied with their job, even though the rates of their original expectations on job satisfaction were high, reaching 75%. In the case of this research, we can see that the shortage in nursing personnel, the increased responsibilities, and also the risk of infections, due to the heavy condition of the patients, as well as the occasional death of the patient were the most important stressful factors (Brokalaki, 2001).

The so called secondary traumatic stress, due to the heaviness of the disease often exhausts the nurses. The nurses who were about to quit evaluated the working environment as being very negative (Gardner, 2007). The autonomy and the undertaking of initiatives in the workplace, and also the appropriate professional relationships are main components in improving the working environment in every nursing field (Argentero, 2008). A holistic approach of the working environment is necessary in order to increase the nurses' job satisfaction and consequently their professional performance (Weber, 2007).

### Conclusion

The job satisfaction is a parameter with a great interest for modern health systems. It is related to the nurses' professional burn out syndrome and the mobility in the nursing profession. The low job satisfaction is partly responsible for the lack of nurses, which is a worldwide phenomenon. The main reason, as it is concluded from various researches in our country and other countries, is the conditions for practicing nursing; these are related much less to the nature of the work, and much more to organizational

issues which reflect the structure and the problems of the health systems.

The job satisfaction is a high priority issue that the nursing institutions around the world must deal with carefully. If they don't, the turnover rate will continue to grow resulting in the even greater lack of nursing staff. In regard to the Greek field, more surveys are required in order to examine in depth which factors and to what extent define the nurses' job satisfaction in our country.

### REFERENCES

- Adams A., Bond S., (2000). Hospital nurses' job satisfaction, individual and organizational characteristics. *Journal of Advanced Nursing* 32(3), 536-543.
- Aiken LH, Clarke SP, Sloanne DM, Sochalski J., Silber JH (2002) Hospital nurse staffing and patient mortality, nurse burnout and job dissatisfaction. *JAMA* 288:1987-1993
- Argentero P, Dell'Olivo B, Ferretti MS. (2008) Staff burnout and patient satisfaction with the quality of dialysis care. *Am J Kidney Dis*. 51(1), 80-92
- Barton, J. Choosing to work at night: A moderating influence on individual tolerance to shift work. (1994). *Journal of Applied Psychology*. 79(3) 449-454
- Best MF, Thurston NE. (2004) Measuring nurse job satisfaction. *J Nurs Adm* 34(6):283-90.
- Blegen M.A. & Mueller C.A. (1987) Nurses' job satisfaction : a longitudinal analysis. *Research in Nursing and Health*, 227-237.
- Borda R., Norman I., (1997) Factors influencing turnover and absences

of nurses: a research review. *International Journal of Nursing Studies*, Vol 34 No 6 pg385-394.

Boumans N.P.G. & Landeweerd J. (1993). Leadership in the nursing unit: relationships with nurses «well- being». *Journal of Advanced Nursing* 18, 767-775.

Buchan J. (1994) Nursing shortages and human resource planning. *International Journal of Nursing Studies* 31 (5), 460-470.

Buchan J. (2002) Global nursing shortages are often a symptom of wider health system or societal ailments *BMJ*, 324(7340): 751-752

Brokalaki H, Matziou V, Thanou J, Ziropiannis P, Dafni U, Papadatou D. (2001). Job-related stress among nursing personnel in Greek dialysis units.

*EDTNA ERCA J* 27(4), 181-6.

Bryson C (2005). The role of peer mentorship in job satisfaction of registered nurses in the hemodialysis unit. *CANNT J* 15 (3), 31-4

Cavanagh S.J. (1990) Predictors of nursing staff working in hospitals. *Journal of Advanced Nursing* 15, 373-380. 21(4):37-44.

Cooper, C., Cartwright, S. (1994) Healthy Mind; Healthy Organization A Proactive Approach to Occupational Stress. *Human Relations*, 47, 4, 455-471

Cowin L, Jacobsson D (2003). The nursing shortage: part way down the slippery slope. *Collegian* 10 (3), 31-5

Dermod, K., Bennett P.N. (2008). Nurse stress in hospital and satellite haemodialysis units. *J Ren Care*. 34(1), 28-32.

Di Iorio, B., Cillo, N., Cucchiello, E., Bellizzi, V. (2008) Burn-out in the dialysis unit. *J Nephrol*. 21(Suppl 13), S158-62.

Gardner JK, Thomas-Hawkins C, Fogg L, Latham CE (2007). The relationships between nurses' perceptions of the haemodialysis unit work environment and nurse turnover, patient satisfaction, and hospitalizations. *Nephrol Nurs J*. 34(3), 271-81

Hart, G., Rotem, A. (1995). The clinical learning environment: nurses' perceptions of professional development in clinical settings. *Nurse Educ Today*. 15(1):3-10

Health Care Advisory Board (2001) The nurse perspective: drivers of nurse satisfaction and turnover. The Health Care Advisory Board, Washington D.C., USA.

Karasek R, Gardell B, Lindell J. Work and non-work correlates of illness and behaviour in male and female Swedish white collar workers. *J Occup Behav* 1987; 8:187.

Karasek R, Choi B, Ostergren P, Ferrario M, De Smet P (2007). Testing Two Methods to Create Comparable Scale Scores between the Job Content Questionnaire (JCQ) and JCQ-Like Questionnaires in the European JACE Study. *Int J Behav Med*. 14 (4):189-201

Khowaja K., Merchant R., Hirani D. (2005) Registered nurses perception of work satisfaction at a Tertiary Care University Hospital. *Journal of Nursing Management* 13:32-39

Kluger, M.T., Bryant, J. (2008) Job satisfaction, stress and burnout in anaesthetic technicians in New Zealand *Anaesth Intensive Care*. 36(2):214-21

Lee, H., Hwang, S., Kim, J., Daly, B. (2004) Predictors of life satisfaction of Korean nurses. *J Adv Nurs*. 48(6):632-41.

Lu, H., While, A.E., Barriball, K.L. (2005) Job satisfaction among nurses: a literature review. *Int J Nurs Stud*. 42(2):211-27

Mc Neese Smith D. (1993) Leadership behavior and employee effectiveness. *Nursing Management* 24(5), 38-39

Morrison R.S., Jones L., & Fuller B. (1997) The relation between leadership style and empowerment on job satisfaction of nurses. *Journal of Nursing Administration* 27(5), 27-34.

Murphy F. (2004) An investigation into stress levels amongst renal nurses. *EDTNA ERCA J*. 30 (4), 226-9

O'Connor E, Peters L, Gordon S (1978). The Measurement of Job Satisfaction: Current Practices and Future Considerations. *Journal of Management*, Vol. 4, (2), 17-26

Olthuis G, Leget C, Dekkers W (2007). Why hospice nurses need high self-esteem. *Nurs Ethics* 14 (1), 62-71

Parasuraman S, Granrose C, Greenhaus J (1992) A Proposed Model of Support Provided by Two-Earner Couples. *Human Relations*, 45, (12), 1367-1393

Peterson C.A. (2001) Nursing shortage: not a simple problem- no easy answers. *On line Journal of Issues in Nursing* 6(1), 1-14

Rice, R.W., Phillips, S.M., McFarlin, D.B. (1990), "Multiple discrepancies and pay satisfaction", *Journal of Applied Psychology*, 75(4), 386-93.

Sabo BM (2006). Compassion fatigue and nursing work: can we accurately capture the consequences of caring work? *Int J Nurs Pract* 12 (3), 136-42

Severinson E., (2001) Factors influencing job satisfaction and ethical dilemmas in acute psychiatric care. *Nursing and Health Sciences* 3, 81-90. 25

Shader, K Broome, M E., Broome, CD., West, ME., Nash, M. (2001) Factors Influencing Satisfaction and Anticipated Turnover for Nurses in an Academic Medical Center. *Journal of Nursing Administration*. 31(4):210-216

Staiger DO et al. (2000) Expanding Career Opportunities for Women and the Declining Interest in Nursing as a Career. *Nursing Economics* 18 (5): 230-236.

Stapleton, P., Henderson, A., Creedy, D.K., Cooke, M., Patterson, E., Alexander, H., Haywood, A., Dalton, M. (2007). Boosting morale and improving performance in the nursing setting. *J Nurs Manag*. 15(8):811-6

Tselebis, A., Gournas, G., Tzitzanidou, G., Panagiotou, A., Ilias, I. (2006). Anxiety and depression in Greek nursing and medical personnel. *Psychol Rep*. 99(1):93-6.

Viswanathan AN, Hankinson SE, Schernhammer ES. (2007) Night shift work and the risk of endometrial cancer. *Cancer Res*. 67(21):10618-22.

Weber J. (2007) Creating a holistic environment for practicing nurses. *Nurs Clin North Am*. 42 (2): 295-30

West, S.H., Ahern, M., Byrnes, M., Kwanten, L. New graduate nurses adaptation to shift work: can we help? (2007) *Collegian*. 14(1):23-30.

Wheeler H. & Riding R (1994) Occupational stress in general nurses and midwives. *British Journal of Nursing* 3(10), 527-534

#### Greek literature

Charalampidou, E (1996) .Nurses' job satisfaction in hospital settings, Thesis, University of Athens, Dept of Nursing Studies.

#### Internet sites

Mayo's Hawthorne Experiments, [online], available at:

<http://www.telelavoro.rassegna.it/fad/socorg03/14/Elton%20Mayo-Hawthorne.htm> [accessed: 18/07/05]