



**International Journal of Biology, Pharmacy
and Allied Sciences (IJBPAS)**
'A Bridge Between Laboratory and Reader'

www.ijbpas.com

**ASSESSMENT OF NURSES WORKFORCE AND THEIR JOB SATISFACTION IN
PUBLIC SECTOR HOSPITALS IN QUETTA, PAKISTAN**

NADIA NOREEN^{1}, NOMAN UL HAQ², AQEEL NASIM^{1*}, SOHAIL RIAZ¹**

1. M.Phil. Scholar, Department of Pharmacy Practice, Faculty of Pharmacy & Health Sciences, University of Balochistan, Quetta, Pakistan
2. Assistant Professor, Faculty of Pharmacy & Health Sciences, University of Balochistan, Quetta, Pakistan

****Principal Author: Nadia Noreen: E Mail: nadianoureen1980@gmail.com**

***Corresponding Author: Aqeel Nasim: E Mail: aqeel_nasim@yahoo.com; Mob.: 0092
333 7879598**

Received 26th Oct. 2016; Revised 25th Nov. 2016; Accepted 25th Jan. 2017; Available online 1st April 2017

ABSTRACT

Objective:

To assess the female workforce and their job satisfaction in government hospitals in Quetta, Pakistan.

Methods:

Mixed method Prospective and Retrospective study conducted on total of 579 female healthcare professionals in Government hospitals of Balochistan, Quetta. All the female health care professionals (medical doctors, pharmacists, nurses) working in government hospitals targeted for the study. Questionnaire for job satisfaction consists of domains i.e. Authority, Promotion, relation with patient, Relation with other health care provider, Pay and Professional development along with socio-demographic variables. All female employees present on their duties on time who agree to contribute in study were included. Data was collected from the period of July-2015 to April-2016. Descriptive statistics have been done by using SPSS version 20.

Results

Majority of participants (n= 304, 52.5%) were nurses. having majority (n=155, 51.0) ranges between 25 - 30 years. Majority of them were married (n=184, 60.5%). Maximum respondents 97 (31.9%) were have experience of 1 – 5 years. Overall satisfaction score demonstrated that maximum respondents were satisfied, out of which majority of respondents 266 (87.5%) were satisfied, however there is no significant difference was found among respondents ($p=7.012$). however, there is significance difference found among age groups and satisfaction level ($p<0.001$).

Conclusion

It is concluded that overall satisfaction was found to be satisfied, however it is showed that early career level in respondents were more satisfied, as the age level was increased there is low gradient of satisfaction with job.

Keywords: Job satisfaction, nurses, Quetta, Pakistan

INTRODUCTION

The main emphasis of the discussion has been the workforce and what is understood as a predictable waning in figures. Though, drawing assumption from cross sectional date disregards the many opposing inspirations affecting health workforce of female in older age working this enhancing among female day by day this is including the policy which changes the superannuation values and regulatory changes may leads to delay the period of retirement [1].

In Australia, female workforce rate increasing all age because of delaying child. Short family members, policy criteria child care community behavioral changes which correlate with the female participation increased 1979 with ratio of 42.3% and in

2008 march 58.4% [2, 3] in 2002,59% and 2022, 8% increased participation of married female. This is strongly appreciable female participation in health professional work force. Healy also discussion carry on at the older time of workforce may have more skillful active and efficient in their work [4]. In1996 resident, out of 33, 218, women 58.5% entered 1of 4 zone. 22.1 % in internal medicine. Pediatric, 14.3%; 13.1% family practice; obstetrics 9.0% gynecology 1.3% of specialization in ophthalmology. In spite of surgeries sub classified equal surgery 406% otolaryngology dermatology 1.3%, surgery of orthopedic 0.6% [5]. There are many reason lack of female role model in male dominate fields and lack of demand from

male dominate fields and also exposure to the concerned field further more participation of women in medical field related with employment criteria ,woman physician in Mexico are highly unemployed than men [5]. Female pharmacists were more than four times as likely as male pharmacists to work part time [5].1996 in Australia study on female participation in Australia medical workforce estimated female total hour work 63% than counterpart where as 75% ratio in practicing specialist in studies it is found that female employee work lesser than male. Allocation of male and female in a practice is different mostly female are dislike to perform the practice in ruler area than the usual prefer urban area.

Over 86% of pharmacists were actively practicing pharmacy at the time of these surveys. There has been a reduction in pharmacist's participation in the workforce between 2000 and 2004 as illustrated in the full time equivalent contribution. This decreased between 2000 and 2004:0.87 to 801 for women 0.99 to 0.91 for men [5]. In Britain 52% female pharmacist worked but their serving is 33 hours per week which is short when compare with male working in community and academic area the difference of ratio hospital primary and managerial post [6].

During post two decades' gender discrimination high light in profession of pharmacy in early ages male was dominant in pharmacy profession now highly attracted by women. Demographics changes due to the shortage workforce it also suggested female are not willing to perform full duty time and this reason leads to the bad effect on professional discipline which concerned with not operating their own stores, in managerial areas and not evolving in organizational matters. Female home responsibility is directly effect on the profession [7].

According to the 1996 national sample survey of registered nurses in developed countries large number of females is present in health care system. In United State female comprise of 95% of total registered nurses woman's are main nursing workforce in developing countries for example in Sri Lanka estimated female in nursing are 80% [8]. Though male are minority in nursing female have to face difficulty in decision making because of male dominating doctors or from administrators who supposed to be leadership [9]. Nursing is the female dominating profession characteristics by less pay, poor working conditions low status less potential for promotion and poor education [10].

Overlapping of human motivation theories with the theory of job satisfaction, main models in this area encompassed: Maslow's needs hierarchy theory [11] Herzberg's [12] motivator Hygiene theory; the job characteristics model [13] and the dispositional approach [14].

Job satisfaction is directly related the work area psychology regard with work place and various factors involved for example organization social issue psychosocial probation work style changes [15]

Nursing staff shortages increase worldwide [16]. Which included; Low pay, abuse by demanding patients, low cooperation from doctors ,pressure of work [17] work environment are related factor and lack of opportunities of advancement [18]. Some of the most important reasons leading to nursing skills losses [19]. Job satisfaction impacts on patient care [20]. With low job satisfaction staff find difficulty to provide care for patient and to create a friendly and supportive atmosphere in health care setting with low level of job satisfaction short cuts performance in their duties [21].

There was no study conducted to evaluate female workforce, particularly on nurses. Therefore, this study aimed to assess the nurses workforce and their job satisfaction in government hospitals in Quetta, Pakistan.

MATERIAL AND METHODS:

Study Design

Mixed methodology Prospective and Retrospective cross-sectional study was conducted. Prospective design carried out job satisfaction while retrospective carried out on previous data of female work force in government hospital Quetta.

Study Setting

The study was conducted from Government hospitals of Quetta city; including

1. Sandeman provincial hospital Quetta (SPHQ)
2. Bolan medical complex hospital Quetta (BMCHQ)
3. Sheikh Zayyed Bin Khalifa hospital Quetta (SZBKQ)
4. Fatima Jinnah Chest Hospital Quetta (FJCHQ)
5. Mohtarma Shaheed Benazir Bhutto hospital Quetta (MSBBHQ)
6. Government helper eye hospital Quetta
7. Baluchistan institute of nephrology unit Quetta

Study Participants

The participants of the study were all the available female nurses in the hospitals of Quetta in the contemporary year.

Inclusion criteria

All female employees present on their duties on time who agree to participate in that study.

Exclusion criteria

Those who were absent from their duties due to educationally leave or earn leave will be excluded and those who were not interested to participate in that study.

Study tool:

Questionnaire for job satisfaction prospective data has been used as a tool to collect the responses of the respondents. The tool was originally adopted from Employee Satisfaction Survey, 2009 and modified by experts of Department of Pharmacy Practice faculty of pharmacy health Sciences.

The questionnaire has two sections. In first section, demographic characters are included. These are age, marital status, experience, education and department. The second section of the questionnaire having six domains which are authority, promotion, relation with patient, relation with other health care provider, salary and professional development respectively.

The tool consists of five point Likert scale ranging from strongly disagree =1; disagree=2; neutral=3; agree=4; strongly agree=5.

Translation:

A Standard forward-backward-forward translation method was used for translation.

Reliability and validity

The tool used is already validated and reliable to be used. This scale is having internal consistency (Cronbach's alpha reliability) 0.70. The questionnaire also undergone face validation to check out that whether it serves the objectives or not. For face validation experts of faculty of pharmacy were consulting. Their comments were taken into consideration and changes were made according to expert comments and then was used for data collection.

Data collection:

The researcher collected the convenient data sampling personally by visiting the all government hospital located in Quetta city with the permission of higher authorities of the concerned hospitals. The researcher distributed the questionnaires among the available female pharmacists, nurses and doctors. The researcher got the questionnaire to be filled by 43 female pharmacists, 304 nurses and 232 doctors for job satisfaction and retrospective data collected from work station roster from 7 hospitals of Quetta.

Ethical Considerations:

The study was completed conferring to national bioethics committee Pakistan

guidelines [22] and additional study has been accepted by Research Committee from department of Pharmacy Practice, University of Baluchistan. Written consent was reserved from sample prior to data collection. Females were ensured about the confidentiality of their answers and their right to leave study anytime. No names were written on the demographic questionnaire [22].

Analysis

The data was analyzed by using SPSS 20 version. The following statistics have applied to conclude the results. Descriptive statistics were used to validate the characteristics of the study population. Categorical variables were measured as frequency and percentages where continuous variables were expressed as mean± standard deviation. Inferential statistics ($p < 0.05$) were used to assess the significance among study variables.

RESULTS

Demographic characteristics Nurses

Demographic characteristics shown in table 1; which demonstrates that majority of nurses 155 (51.0%) were age ranges between 25-30 years. Marital status highlighted that maximum nurses 184 (60.5%) were married. Two hundred seventeen (71.4%) nurses were having Diploma as their main education. Job placement result showed that maximum nurses were 153 (50.3%) from Bolan

Medical College Quetta. Experience was reported maximally 97 (31.9%) in 1- 5 years of job. Most of the nurses 231 (76.0%) were performing ward duty.

Job Satisfaction

Authority:

The authority result showed in table no.2 that majority of nurses 144 (47.4%) were disagreeing in having enough liberty to choose in what way to do own work. Majority of respondents 119 (39.1%) were disagree in answering about they are able to set the place of work. Majority of respondents 137 (45.1%) were also disagree in the extent of time that they can provide patient care. Therefore, the statement is rejected by the respondents.

Promotion

The promotion results among nurses showed that majority of nurses 102 (33.6%) were disagree in getting expected timely promotion. Majority of nurses 146 (48%) were disagree in explaining that they can get enhancement role after getting promotion. Therefore, the statement is rejected by the respondents.

Relation with Patients:

Relations with patient's result showed that majority of respondents 197 (64.8%) were disagree in respondents try to obey with instructions as well as information given to

them. Majority of respondents 196 (64%) were feel strong personal connections with patients. Similarity disagree response seen in majority of respondents 165 (54.3%) direct interactions with patients are professionally rewarding.

Relation with another health care provider

Relation with other health care provider result showed that majority of respondents 172 (56.6%) were disagree in that they obtain acceptable gratitude for work well done from hospital Physician. Majority of respondents 168 (55.3%) were neutral in Good working relationship exist between me and hospital Physician. Majority of respondents 109 (35.9%) were disagreed in that Physician never consult with me on professional matters. Majority of respondents 161 (53%) were disagreed in that it is easy to communicate with other Health care provider with whom I share patients. Relation with other health care providers result showed that majority of respondents 175 (57.6%) disagree in receiving support from physician for my patient care recommendations. Majority of respondents 165 (54.3%) were disagreed in being appreciated as part of the system. Majority of respondents 160 (52.6%) disagreed in Pharmacist are unhelpful once initiate communication with them. Majority of respondents 198 (65.5%) were disagree in

that support from Physicians for my patients care recommendations.

Salary

Result showed that majority of respondents 102 (33.6%) were disagreed in monetary reward they received from work less than they should. Majority of respondents 124 (40.8%) were agreed in that pay is equal to wage of people having same designation in the other provinces or federal. Majority of respondents 132 (43.4%) were disagreed in seeing the type of labor they do and the sum of accountability they wage is correct. Majority of respondents 106 (34.9%) were disagreed in salary is too low. Majority of respondents 132 (43.4%) were disagreed in job offers satisfactory salary.

Professional Development

Majority of respondents 141 (46.4%) were disagreed in that they get sufficient amount of training after my appointment. Majority of respondents 187 (61.5%) disagreed in that they get sufficient amount of training after my appointment. Majority of respondents 108 (35.5%) were disagreed in they get sufficient opportunities to training / education on new technological / academics during my services.

Comparison of mean score with demographics

Table no. 3 showed association of mean satisfaction score with demographics, none

of the demographic was significantly associated with overall satisfaction (i.e. $p > 0.05$) except to job place ($p = 0.001$) and Department ($p = 0.04$).

Table 1: Demographic Characteristics of nurses

| Type of job | Frequency | Percent |
|---|-----------|---------|
| Age | | |
| 25 - 30 years | 155 | 51.0 |
| 30 - 35 years | 71 | 23.4 |
| 35 - 40 years | 46 | 15.1 |
| More than 40 | 32 | 10.5 |
| Marital | | |
| Married | 184 | 60.5 |
| Un-married | 111 | 36.5 |
| Widow | 7 | 2.3 |
| Divorced | 2 | .7 |
| Education | | |
| Graduate | 56 | 18.4 |
| Post Graduate | 24 | 7.9 |
| Any Special Course | 7 | 2.3 |
| Diploma | 217 | 71.4 |
| Job Place | | |
| Bolan medical Complex | 153 | 50.3 |
| Provincial Civil Sandeman Hospital | 109 | 35.9 |
| Fatima Jinnah Tuberculosis Hospital | 23 | 7.6 |
| Baluchistan Institute Nephrology Quetta | 7 | 2.3 |
| ShiekhKhalifa Bin Zaid Hospital | 12 | 3.9 |
| Experience | | |
| 1 - 5 years | 97 | 31.9 |
| 6 - 10 years | 83 | 27.3 |
| 11 - 15 years | 64 | 21.1 |
| More than 16 years | 60 | 19.7 |
| Department | | |
| Outpatient department | 41 | 13.5 |
| Ward | 231 | 76.0 |
| Admin | 17 | 5.6 |
| Operation theatre | 15 | 4.9 |

Table 2: Job Satisfaction of nurses Questionnaire

| Domains | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|--|----------------|--------------|-------------|--------------|-------------------|
| Authority | | | | | |
| I am allowed a sufficient amount of freedom to decide how to do my work. | 20 (6.6%) | 74 (24.3%) | 27 (8.9%) | 144 (47.4%) | 39 (12.8%) |
| I am able to set the place which I work. | 15 (4.9%) | 113 (37.2%) | 30 (9.9%) | 119 (39.1%) | 27 (8.9%) |
| I determine the extent of time that I provide patient care- | 25 (8.2%) | 78 (25.7%) | 25 (8.2%) | 137 (45.1%) | 39 (12.8) |
| Promotion | | | | | |
| If you get timely promotion is it up to your expectation. | 17 (5.6%) | 84 (27.6%) | 48 (27.6%) | 102 (33.6%) | 53 (17.4%) |
| Do you get enhancement of role after getting promotion? | 8 (2.6%) | 57 (18.8%) | 36 (11.8%) | 146 (48%) | 57 (18%) |
| Relation with Patients | | | | | |
| I general find that patients attempt to comply with the directions and advice we give them. | 3 (1.0 %) | 19 (6.3%) | 24 (7.9%) | 197 (64.8%) | 61 (20.1%) |
| I feel strong personal connection with patients. | 1 (3%) | 8 (2.6%) | 20 (6.6%) | 196 (64%) | 79 (26%) |
| My direct interactions with patients are professionally rewarding. | 23 (7.6%) | 35 (11.5%) | 25 (8.2%) | 165 (54.3%) | 56 (18.4%) |
| Relation with other Health care Provider | | | | | |
| I receive adequate recognition for work well done from hospital Physician. | 5 (1.6%) | 32 (10.5%) | 24 (7.9%) | 172 (56.6%) | 71 (23.4%) |
| Good working relationship exist between me and hospital Physician- | 28 (9.2%) | 20 (6.6%) | 168 (55.3%) | 88 (28.9%) | -- |
| Physician never consults with me on professional matters. | 30 (9.9%) | 101 (33.2%) | 52 (17.11%) | 109 (35.9%) | 12 (3.9%) |
| It is easy to communicate with other Health care provider with whom I share patients. | 12 (93.9%) | 52 (17.1%) | 37 (12.2%) | 161 (53%) | 42 (13.8%) |
| I receive support from physician for my patient care recommendations | 3 (1%) | 42 (13.8%) | 27 (8.9%) | 175 (57.6%) | 57 (18.8%) |
| I am respected as part of the health care team by hospital health care provider. | 5 (1.6%) | 32 (10.5%) | 8 (2.6%) | 165 (54.3%) | 94 (30.9%) |
| Pharmacists are uncooperative when I initiate communication with them. | 12 (3.9%) | 57 (18.8%) | 30 (9.9%) | 160 (52.6%) | 45 (14.8%) |
| I received support from Pharmacist for my patients care recommendations. | 6 (2.0%) | 28 (9.2%) | 32 (10.5%) | 198 (65.5%) | 40 (13.2%) |
| Salary | | | | | |
| The monetary reward I received from my work less than they should be. | 13 4.3% | 94 30.9% | 39 12.8% | 102 33.6% | 56 18.4% |
| My salary is equivalent to the salary of persons holding similar positions in the other provinces or federal. | 31 10.2% | 124 40.8% | 47 15.5% | 86 28.3% | 16 5.3% |
| Considering the kind of work, I do and the amount of responsibility I have my pay is about right. | 30 9.9% | 82 27% | 39 12.8% | 132 43.4% | 21 6.9% |
| Comparing my position with other positions with this hospital / health system (compare seniority, education, importance of work, etc.) my salary is too low. | 14 4.6% | 98 32.2% | 43 14.1% | 106 34.9% | 43 14% |
| My job offers satisfactory salary. | 32 10.5% | 67 22% | 47 15.5% | 132 43.4% | 26 8.6% |
| Professional Development | | | | | |
| I get sufficient amount of training after my appointment. | 33 10.9% | 70 23.6% | 26 8.6% | 141 46.4% | 34 11.2% |
| Continuous development throughout my job. | 8 2.6% | 42 13.8% | 29 9.5% | 187 61.5% | 38 12.5% |
| I get sufficient opportunities to training / education on new technological / academics during my services. - | 46 15.1% | 95 31.1% | 31 10.2% | 108 35.5% | 24 7.9% |

Table 3: Comparison of mean score with demographics

| Type of job | Frequency | Mean | Standard Deviation | P-Value |
|---|-----------|-------|--------------------|---------|
| Age* | 155 | 82.84 | 9.156 | 0.237 |
| 25 - 30 years | 71 | 83.49 | 8.522 | |
| 30 - 35 years | 46 | 84.96 | 6.653 | |
| 35 - 40 year More than 40 | 32 | 81.69 | 8.993 | |
| Marital Status* | | | | 0.394 |
| Married | 184 | 82.53 | 7.774 | |
| Un-married | 111 | 84.31 | 9.845 | |
| Widow | 7 | 83.14 | 11.187 | |
| Divorced | 2 | 82.50 | 6.364 | |
| Education* | | | | 0.557 |
| Graduate | 56 | 81.36 | 8.735 | |
| Post Graduate | 24 | 81.92 | 10.078 | |
| Any Special Course | 7 | 84.71 | 7.868 | |
| Diploma | 217 | 83.76 | 8.475 | |
| Job Place* | | | | 0.001 |
| Bolan medical Complex | 153 | 80.67 | 8.643 | |
| Provincial Civil Sandeman Hospital | 109 | 86.96 | 8.074 | |
| Fatima Jinnah Tuberculosis Hospital | 23 | 80.91 | 6.367 | |
| Baluchistan Institute Nephrology Quetta | 7 | 79.00 | 4.282 | |
| Shiekh Khalifa Bin Zaid Hospital | 12 | 87.83 | 5.357 | |
| Experience* | | | | 0.074 |
| 1 - 5 years | 97 | 85.08 | 9.423 | |
| 6 - 10 years | 83 | 81.70 | 7.617 | |
| 11 - 15 years | 64 | 82.41 | 8.728 | |
| More than 16 years | 60 | 83.03 | 8.316 | |
| Department* | | | | 0.049 |
| Outpatient department | 41 | 84.61 | 8.348 | |
| Ward | 231 | 82.53 | 8.845 | |
| Admin | 17 | 87.88 | 7.175 | |
| Operation theatre | 15 | 84.13 | 6.312 | |

* Kruskal Wallis Test

DISCUSSION

The result of the present study shows that salary is most important factor of dissatisfaction. But in past research employment of women has increased qualitatively and quantitatively all over the world as a result of far-reaching changes that have promoted women to take up employment. In most of the countries, there is a marked increase in the employment opportunities for women, especially after the Second World War(103). The results revealed that all the categories of subjects

were dissatisfied with almost ten job facets. The study further revealed that physicians were more dissatisfied with pay, promotion, and recognition than any other groups. Nurses were more dissatisfied with recognition and working environment, promotional opportunity, and recognition, relation with colleagues, working environment, and work autonomy were more important factors than job security, participation, and relation with colleagues as perceived by all categories of subjects for their overall job satisfaction. Salary was

perceived as one of the least important factors for overall job satisfaction of the subjects (104). Many investigators also found similar findings of salary as one of the least important sources of job satisfaction. For instance, Herzberg et al.(105) found that wages was ranked as the seventh important factor for job satisfaction by the respondents which confirmed the findings of the present study. Several investigators in their recent studies of Bangladesh also found salary as one of the least important factors for overall job satisfaction (106).

Present research shows majority of respondent are age group of 25-30 years and most are married. However in the previous study showed that 250 educated working women interviewed, more than 55% belonged to the aged group of 31 to 40 years. Below 30 years were 34%, and 11% were above 40 years of age. About 86% were married and the rest were unmarried (105).

In this study most of the female nurses, pharmacists and physicians were graduate and least no of nurses, pharmacists and physicians were doing specialization in their fields. Educational qualifications, 56% had Bachelor degree and about 18% were Master degree holders, others being Matriculate or Intermediate. In nursing, training was compulsory for all, which lasted for three to

four years (105).

The Result derived from present study most of the female nurses, pharmacists and physicians shared they had never provided with trainings and refresher courses during their job.

In respect of salary, it was found that the average monthly salaries of the subjects were: 3165; physicians, Tk. 4880; and nurses, Tk. 4228. All categories of respondents complained about insufficient and low salaries. Nurses said that their salaries were inadequate even to meet their daily requirements and life with minimum amenities. The physicians were very vocal and said for all the years of hard work, they got a salary which was not sufficient comparable of their responsibilities as well as long and no specified hours of work (105).

CONCLUSION

It is concluded that overall satisfaction was found to be satisfied, however it is showed that early career level in respondents were more satisfied, as the age level was increased there is low gradient of satisfaction with job. This decline in job satisfaction is seen with less acknowledgments and gratitude for nurses who were working many years in the hospitals. Efforts should be made to draw attention of policy makers and administration

to provide more facilities to senior workers in order for proven work.

REFERENCES

- [1] Segal, L. and T. Bolton, *Issues facing the future health care workforce: the importance of demand modelling*. Australia and New Zealand Health Policy, 2009. 6(1): p. 1.
- [2] Commission, P., *Australia's health workforce*. SSRN Working Paper Series, 2006.
- [3] Heine, J., S. Koch, and P. Goldie, *Patients' experiences of readiness for discharge following a total hip replacement*. Australian Journal of Physiotherapy, 2004. 50(4): p. 227-233.
- [4] Healy, J., *The benefits of an ageing population*2004: Australia Institute.
- [5] Marchal, B. and G. Kegels, *Health workforce imbalances in times of globalization: brain drain or professional mobility?* The International Journal of Health Planning and Management, 2003. 18(S1): p. S89-S101.
- [6] Hassell, K., *The national workforce census:(6) The gendered nature of pharmacy employment in Britain*. Pharmaceutical Journal, 2003. 271(7271): p. 550-552.
- [7] Gardner, S.F. and C.D. Stowe. *The impact of a gender shift on a profession: women in pharmacy*. in *Forum Public Policy*. 2006. Citeseer.
- [8] Baume, E., M. Juárez, and H. Standing, *Gender and Health Equity Resource Folder*. Institute of Development Studies, Universität Sussex, Brighton, 2000.
- [9] Salvage, J. and S. Heijnen, *Nursing in Europe: a resource for better health*. Vol. 74. 1997: WHO Regional Office Europe.
- [10] Poster, E.C., *A multinational study of psychiatric nursing staffs' beliefs and concerns about work safety and patient assault*. Archives of psychiatric nursing, 1996. 10(6): p. 365-373.
- [11] Maslow, A.H., et al., *Motivation and personality*. Vol. 2. 1970: Harper & Row New York.
- [12] Herberg, F., *Work and the nature of man*. Cleveland: World Publishing Company, 1966.
- [13] Fried, Y. and G.R. Ferris, *The validity of the job characteristics model: A review and meta-analysis*. Personnel psychology, 1987. 40(2): p. 287-322.

- [14] Judge, T.A. and R.J. Larsen, *Dispositional affect and job satisfaction: A review and theoretical extension*. Organizational Behavior and Human Decision Processes, 2001. 86(1): p. 67-98.
- [15] Hassard, J., K. Teoh, and T. Cox, *From OSHwiki*.
- [16] Hoxha, A., E. Avdullari, and m. Duli, *organizational commitment and job satisfaction among nurses in public hospitals in albania*.
- [17] Miracle, V. and J. Miracle, *The nursing shortage: why we stay, why we leave, and why we never considered nursing as a career in the first place*. Dimensions of Critical Care Nursing, 2004. 23(5): p. 236.
- [18] Pietersen, C., *Job satisfaction of hospital nursing staff*. SA Journal of Human Resource Management, 2005. 3(2).
- [19] Ma, C.-C., M.E. Samuels, and J.W. Alexander, *Factors that influence nurses' job satisfaction*. Journal of nursing Administration, 2003. 33(5): p. 293-299.
- [20] Cavanagh, S.J., *Job satisfaction of nursing staff working in hospitals*. Journal of Advanced Nursing, 1992. 17(6): p. 704-711.
- [21] Fako, T.T. and N. Forchen, *Job satisfaction among nurses in Botswana*. Society in Transition, 2000. 31(1): p. 10-21.
- [22] Bhutta, Z.A., *Ethics in international health research: a perspective from the developing world*. Bulletin of the World Health Organization, 2002. 80(2): p. 114-120.