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Nork Marash Medical Center

**EVALUATION OF NURSE-ASSESSED WORK
ENVIRONMENT AND JOB SATISFACTION AT
NORK MARASH MEDICAL CENTER**

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Yerevan, 2003

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Executive Summary

Background. Adequate working environment and nurse staffing are important predictors of quality of health care and patient outcomes. Research has indicated that emotional exhaustion, low responsiveness of managerial leadership to employee concerns and problems, and hospital nurse shortages affect patient outcomes and nurse retention in hospital practice.

Aim. The adequacy of nurse staffing in hospital organization was assessed at Nork Marash Medical Center (NMMC) under the aegis of Quality Assurance Project jointly implemented by the American University of Armenia (AUA) and NMMC.

Methods. The study was a cross-sectional survey conducted among NMMC nurses to obtain baseline data to design and evaluate future improvement activities. The data were collected through self-administered questionnaires. All nurses (70) permanently working at NMMC participated in the study.

Results. Participation rate was 64.3%. Scores for all cumulative indicators of nursing work were the lowest among recently surveyed hospitals in Armenia, but higher than in recently surveyed hospitals in Russia with the exception of career support and nurse competence cumulative indicators. When comparing to US Magnet hospitals NMMC score was significantly higher only for the nurse-physician relationships indicator. It was hypothesized that nursing work indicators at NMMC would reach at least 80% of maximum scores a hospital could gain during an assessment. The investigation revealed that NMMC had significantly lower score for nursing work indicator and statistically higher score for nurse competence when compared to the hypothesized values. NMMC had the highest emotional exhaustion scores across all research sites, as well as when compared to US Magnet hospitals ($p < .001$). Statistically significant difference was indicated also between NMMC observed and hypothesized values for emotional exhaustion and burnout scores.

Majority of nurses at NMMC were either moderately satisfied or a little dissatisfied with their present job. The same pattern was revealed in responses about satisfaction with being a nurse. Job dissatisfaction at NMMC was similar with that in the Armenian hospitals, but significantly higher when compared to Russian and US Magnet hospitals.

The proportion of nurses believing that losing their job during the next 12 months is very or fairly likely was the lowest at NMMC, whereas perceived difficulty of finding another acceptable job was higher at NMMC than in research settings in Russia. Further data analysis indicated that the proportion of NMMC nurses who planned to leave their current position in the next 6-12 months was the highest at NMMC among hospitals surveyed in Armenia, but was lower than among nurses working in Russia hospitals and American Nursing Credentialing Center (ANCC) Magnet hospitals in US. Nevertheless, data analysis indicated that almost all nurses would recommend their family member to receive care at NMMC. This finding was similar across hospitals in Yerevan, but was higher than in the hospitals in Russia.

Most nurses at NMMC evaluated the quality of nursing care provided in their own units as excellent or good. The nurses' perception of patients' ability to manage their own care after discharge was statistically lower at NMMC compared to other hospitals in Armenia and Russia.

Conclusion. The survey provided baseline data on strengths and possible areas for improving nursing care provided at NMMC. Findings can be used to plan further activities seeking to enhance nursing care and to improve quality of care provided at NMMC. The survey provided an opportunity to compare status of nursing care at NMMC with that delivered in other hospitals of Armenia, Russia, and the ANCC Magnet hospitals in the US. Presenting survey results to NMMC nurses to alleviate their concerns related to completion of job-related questionnaires and to further improvements in nursing care is recommended.

1. Background Information

Nork Marash Medical Center (NMMC) is one of the leading health care organizations in Armenia and the only one that provides cardiology and cardiac surgery services to adult and pediatric populations. Beginning in March 2000, a Quality Assurance Project at NMMC was jointly implemented by Center for Health Services Research (CHSR) and Development of American University of Armenia (AUA) and NMMC to improve health care quality at the hospital and obtain international accreditation. NMMC strives to improve quality of provided care through continuous comparisons of health care outcomes data both over time and between similar organizations.

Adequate working environment and nurse staffing are important predictors of quality of health care and patient outcomes [1]. The Center for Health Outcomes and Policy Research, University of Pennsylvania School of Nursing, conducted a survey to reveal current nursing shortage, degree of job dissatisfaction among nurse staff, and quality of care provided in hospitals [1]. Seven hundred hospitals and 43,000 nurses were surveyed in five countries, the United States, Canada, England, Scotland, and Germany, in 1998-99 [1]. The survey revealed low morale/high job dissatisfaction among study participants, considerable emotional exhaustion, low responsiveness of managerial leadership to employee concerns and problems, staff shortages, and other issues that require interventions to sustain and improve high-level quality of health care provided to inpatients [1]. Moreover, similar findings were detected across countries with different health care systems meaning that fundamental problems in nursing care are not unique to any of health care system [1].

Research conducted by Penn's Center for Health Outcomes and Policy Research (PCHOPR) in 210 hospitals indicated that hospital nurse shortage affects patient outcomes and nurse retention in hospital practice [2]. After adjusting for patient and hospital characteristics, each additional patient per nurse increase the probability of death following complications and early post-operative mortality (within 30 days after discharge) by 7% [2]. In addition, increase in patient-to-nurse ratio is strongly correlated with increase of burnout and job dissatisfaction among nurses [2].

The PCHOPR has expanded its research to magnet hospitals to compare adequacy of nurse staffing and other job related aspects with that of nonmagnet hospitals [3]. The research indicates that hospitals awarded ANCC Magnet Recognition have superior patient outcomes including higher patient satisfaction and high nurse job satisfaction [3]. Nurses were more likely to apply for a job and stay for a long time in magnet hospitals regardless of national or regional nurse shortages [3].

Further steps were undertaken by PCHOPR in collaboration with the Center for Health Services Research and Development (CHSR) at the American University of Armenia (AUA), and American International Health Alliance (AIHA) to conduct nursing survey in hospitals in Armenia and Russia [4]. Medical-Research Center for Emergency Care, Teaching Hospital "Erebouni" in Yerevan, Armenia and Central Teaching Hospital, in Moscow, and Hospital #122, in Saint Petersburg, Russia were involved in the research. The research assessed nurse staffing shortage and deficiencies in hospital organization in the countries of the former Soviet Union (Republic of Armenia and Russian Federation), as well as evaluated the applicability of a US hospital quality improvement model to health care systems in these countries [4].

A survey among doctors carried out in five countries graded the nursing staff as one of the most important links in assuring high-quality care in hospitals [1]. Considering the increasing nursing

workload due to the increased number of cardiac surgeries and invasive procedures (500-600 surgeries in 2002 compared to an estimated 700 in 2003) and that the quality of nursing care has never been carefully investigated at NMMC, it was essential to assess the status of current nurse staffing, working conditions, and other job related issues at the hospital that can affect quality of care and patient outcomes at NMMC.

2. Methods

A cross-sectional survey was conducted among NMMC nurses to obtain baseline data to design and evaluate future improvement activities. Data were collected through self-administered questionnaires. The pre-testing of the Armenian version of instrument was done at NMMC. The time elapsed since instrument pre-testing for that project and the survey was enough to minimize contamination.

All nurses permanently working at NMMC participated in the study, except those on their initial probation period for a month. Among temporary staff members working on-call basis, those nurses with monthly working hours equal to that of a part-time employee (80 hours per month) participated. Further, all units at NMMC were included in the survey, so that 70 questionnaires were distributed.

3. Ethical considerations

The study was considered as an internal evaluation process, which did not require obtaining an informed consent from participants. However, the nurses were informed that the participation in this study was voluntary and that their responses would be kept confidential and not linked to any individual. They were allowed to skip answering a question which they perceived to be too sensitive. Completed questionnaires were collected by the assessment team or were brought to the ANP office by the employees themselves. No other NMMC employee was involved in data collection process.

4. Results

Data were entered and analyzed in SPSS 11.0 statistical software. Only single data entry was done. To ensure accuracy of entered information data cleaning by range checks was performed.

4.1. General information

Seventy questionnaires were distributed, whereas forty-seven completed questionnaires were returned. However, two questionnaires were considered incomplete, as half or more questions were left unanswered, so that the effective response rate was 64.3% (Table 1). The survey was completely self-administered. The study team did not encounter direct refusal from study participation. Although the nurses' workload is rather high at NMMC that could influence participation rate, the nurses were given at least one week to fill the questionnaire and were allowed to take it at home, where they could answer the questions in a quiet and comfortable environment. Thus, other than time restriction reasons should be thought to explain low response rate among NMMC nurses.

Table 1. Number and percentage of nurses participated in the survey from each unit

Hospital unit	Number of participants	Percentage of participants
Intensive Care Unit (ICU)	3	6.7
Ward	28	62.2
Laboratories*	5	11.1
Operation Room (OR)	0	0
Ambulatories	6	13.3
Others	3	6.7

* Laboratories unit included Express laboratory, Biochemical laboratory, Immunology and Blood Bank laboratory, and Cardiac Catheterization Lab.

None of nurses working in the operation rooms participated in the study. It is possible that nurses working in one unit specified another one or “others” option because they could have concerns related to confidentiality of their responses. The response rate at NMMC was lower than in other hospitals in Yerevan, Moscow and St.Petersburg which could be explained by the different types of survey administration (Table 2).

Table 2. Response rates in hospital settings*

Response rate (RR)	NMMC, Yerevan	Erebouni Hospital, Yerevan	Emergency Hospital, Yerevan	CCH**, Moscow	Hospital #122, St.Petersburg
RR, percentage	64	100	100	87	76.8

* Data on RR in other hospitals were taken from *Evaluating a Hospital Quality Improvement Model for Selected Hospitals in Armenia and Russia*, Anahit Demirchyan and Michael E. Thompson

** Central Teaching Hospital. Moscow, Russia

All participants were females with the mean age of 31.1 (sd: 7.8, range 21-49 years). Statistically significant difference in nurses’ mean age was detected between laboratory nurses and the ICU and ambulatory nurses. In the ICU nurses were younger than in the laboratories with the mean difference of 16.4 (p=.022). Nurses working in the ambulatories were also younger than nurses working in the laboratories with the mean difference of 13.23 (p = .028). Majority of nurses received their basic nursing education in Armenia (93.2%) and only 6.8% of them were trained in former Soviet Union countries.

The mean work experience as a nurse was 10.3 years (sd: 8.0, range: 1- 26 years), while the mean duration of working in the current unit was 5.0 (sd: 3.3, range: 4 months – 11 years). The mean duration of work experience was not statistically different across hospital departments.

Length of regularly scheduled shift at NMMC was 24 hours (62.8%). This finding was similar to that in Erebouni and Emergency Hospitals in Yerevan and CCH hospital in Moscow (Table 3). 20.9% of nurses mentioned other length of regularly scheduled shift, particularly, more than 24 hours, flexible, or depending on workload.

Table 3. Length of regularly scheduled shifts across the hospitals

Length of shift	NMMC (%)	Emergency hosp. (%)	“Erebouni” hosp. (%)	CCH (%)	Hospital #122 (%)
8 hours	16.3	18.5	34.6	26.6	45.2
12 hours	0	2.2	3.3	6.3	12.2

Length of shift	NMMC (%)	Emergency hosp. (%)	“Erebouni” hosp. (%)	CCH (%)	Hospital #122 (%)
24 hours	62.8	78.5	53.7	57.8	39.9
Other	20.9	0.7	8.5	9.3	2.7

4.2. Nursing work index

The Nursing work index (NWI) was calculated using the same questionnaire as used in selected hospitals in Armenia and Russia, so that the data were completely comparable. In the latter survey the 49-questionnaire scale was reduced to 35-item scale and additional 3 questions reflecting the extent of physicians’ appreciation of nursing work were added to the initial questionnaire. It led to modification of some cumulative indicators, particularly, autonomy and career support, as well as the total Nursing work index. Further data analysis was conducted according to guidelines provided by PCHOPR (Appendix 3).

To assess the status of NMMC with regard to nursing work indicators, a hypothesis was made that the nursing work indicators at NMMC will correspond to at least 80% of the maximum possible scores. This level was considered as a desirable one for all nursing work indicators. The maximum score for each index was calculated by multiplying the number of items composing an indicator by the highest value in response options. Table 4 shows that nursing work indices were significantly lower than the hypothesized value for Nursing Work Index and marginally significant for Nurse Staffing. However, Nurse Competence indicator was statistically higher at NMMC when comparing to the hypothesized value. The remaining indicators of nursing care provided at NMMC were lower than the hypothesized value, but the difference was insignificant.

Table 4. Correspondence of nursing work indices at NMMC with maximum scores

Index	NMMC score	Max possible score	Expected score	P-value*	95% CI**	
					Lower bound	Upper bound
Nursing work index	106.9	140	112	.032	-9.77	-.45
Nurses autonomy	9.38	12	9.6	>.05	-.84	.39
Control over own work	21.4	28	22.4	>.05	-2.15	.20
Relationship with doctors	6.5	8	6.4	>.05	-.32	.58
Nurse staffing	5.9	8	6.4	.049	-.93	-.003
Administrative support	15.3	20	16	>.05	-1.57	.15
Career support	12.5	16	12.8	>.05	-1.01	.43
Nurse competence	6.9	8	6.4	.037	.029	.90

* When comparing observed correspondence with the expected one (80% of the maximum)

** CI – Confidence interval

Scores for all cumulative indicators of nursing work were the lowest at NMMC comparing with surveyed hospitals in Armenia, but higher than at CCH and Hospital #122, Russia. The exceptions were career support and nurse competence cumulative indicators, which were lower at NMMC than in CCH (Table 5).

Table 5. Cumulative indicators of nursing work indicators

Nursing Work Indicators**	NMMC	Emergency hospital	“Erebouni” hospital	CCH	Hospital #122
Nursing work index*	106.9 (sd 15.5)	126.4 [†] (sd 15.0)	114.9 [‡] (sd 16.0)	105.3 (sd 18.7)	103.6 (sd 19.7)
Nurses autonomy*	9.38 (sd 2.0)	10.9 [†] (sd 1.5)	9.6 (sd 2.0)	8.7 [¶] (sd 2.1)	8.6 [¶] (sd 2.2)
Control over own work	21.4 (sd 3.9)	26.0 [†] (sd 2.4)	24.2 [‡] (sd 3.4)	20.8 (sd 4.2)	20.0 [¶] (sd 4.2)
Relationship with doctors	6.5 (sd 1.5)	7.3 [†] (sd 1.0)	6.8 (sd 1.2)	7.0 [¶] (sd 1.3)	6.5 (sd 1.5)
Nurse staffing	5.9 (sd 1.5)	7.5 [†] (sd 1.0)	6.7 [‡] (sd 1.3)	5.6 (sd 1.7)	5.8 (sd 1.6)
Administrative support	15.3 (sd 2.9)	18.2 [†] (sd 2.2)	16.3 [¶] (sd 2.9)	14.8 (sd 3.2)	14.4 [¶] (sd 3.7)
Career support*	12.5 (sd 2.4)	14.5 [†] (sd 2.0)	13.47 [‡] (sd 2.2)	13.0 (sd 2.6)	12.2 (sd 2.8)
Nurse competence	6.9 (sd 1.5)	7.3 (sd 1.2)	7.0 (sd 1.2)	7.1 (sd 1.3)	6.7 (sd 1.5)
Doctors’ value of nursing*	9.6 (sd 2.3)	10.7 [‡] (sd 1.5)	10.0 (sd 1.9)	9.3 (sd 2.5)	8.8 [¶] (sd 2.5)

* These indicators are not comparable with findings from the previous (5-country) research

** All the cases containing at least one missing are excluded

[†] Significant difference when comparing with NMMC, $p \leq 0.001$ (one samples t-test)

[‡] Significant difference when comparing with NMMC, $p \leq 0.01$ (one samples t-test)

[¶] Significant difference when comparing with NMMC, $p < 0.05$ (one samples t-test)

Data analysis was performed to detect the mean differences in each cumulative indicator of nursing work between NMMC and surveyed hospitals in Armenia and Russia using one sample t-test. Data on mean scores for hospitals in Armenian and Russian sites were taken from Evaluating a Hospital Quality Improvement Model for Selected Hospitals in Armenia and Russia survey. Statistically significant differences in almost all cumulative indicators for nursing work were found between NMMC and Emergency Hospital in Armenia, except for nurse competence indicator (Table 5). Higher scores of cumulative indicators represented higher agreement and, thus, positive attitude toward the statements presented in the questionnaire (Appendix 1). NMMC was statistically lower in comparison to Erebouni Hospital with respect to nursing work index, control over own work, nurse staffing, administrative support, and career support cumulative indicators. Comparison of cumulative indicators between NMMC and the Hospital #122, St. Petersburg, Russia, indicated higher score at NMMC for all statistically significant indicators, i.e. autonomy, control over own work, administrative support, and doctors’ value of nursing indicators. NMMC had statistically higher score for autonomy and lower score for relationships with doctors comparing to the CCH in Moscow.

Five cumulative indicators were compared with that of ANCC Magnet hospitals in US using one-sample t-test. NMMC score was significantly higher only for doctors indicator than the ANCC Magnet hospitals ($p = .036$) (Table 6).

Table 6. Comparison of some cumulative indicators with those from US Magnet hospitals

Nursing Work Indicators*	NMMC	ANCC Magnet hospitals, US
	Mean±sd	Mean±sd
Control over own work	21.4±3.9	20.64±3.98
Relationship with doctors	6.5±1.5	6.05±1.25 [‡]
Nurse staffing	5.9±1.5	5.60±1.63
Administrative support	15.3±2.9	14.54±3.30
Nurse competence	6.9±1.5	6.71±1.06

* All the cases containing at least one missing are excluded from the analysis

[‡] Significant difference when comparing with US Magnet hospitals data, $p < 0.05$

Additional analysis was carried out to detect possible differences in cumulative nursing care indicators among different departments at NMMC using ANOVA test.

Table 7. Comparison of cumulative nursing work indicators between NMMC departments

Nursing Work Indicators*	ICU (n=3)	Ward (n=28)	Laboratories (n=5)	Ambulatories (n=6)	Other (n=3)
	Mean±sd	Mean±sd	Mean±sd	Mean±sd	Mean±sd
Nursing work index	96±16.8	107.6±15.7	113±8.6	95.8±17.3	118±11.5
Nurses autonomy	9.3±2.9	9.6±1.8	9.4±1.1	9.3±2.2	7.3±4.5
Control over own work	20.3±2.5	22.1±3.8	21.6±4.8	18.8±4.7	21±2.7
Relationship with doctors	5.3±2.1	6.7±1.4	6.4±1.8	5.8±1.6	7.7±0.6
Nurse staffing	5±1.7	6.2±1.4	5.2±2.3	5.5±1.6	6.3±0.6
Administrative support	14.3±4.6	15.3±2.7	15.4±2	16±3.5	14.7±4.5
Career support [‡]	11±2.7	12.4±2.1	15.2±0.84	10.7±2.6	14.7±0.6
Nurse competence	7	7±1.3	7.2±1.8	6.3±1.9	6.3±2.7
Doctors' value of nursing	7±1.7	9.4±2.4	10.8±1.6	9.8±2.5	11±1.7

* All the cases containing at least one missing are excluded

[‡] Significant value of ANOVA test ($p < 0.01$)

Statistically significant difference was revealed in career support cumulative indicator ($p < .01$). Nurses working in laboratories (include all laboratory departments at NMMC and cardiac catheterization lab) had by 4.53 higher career support score (95% CI: 0.79, 8.28) than those working in ambulatories.

Items constituting nursing work indices were analyzed separately to provide NMMC clinical and administrative leaders with data on nurses' feelings and thoughts of hospital functioning. The questions were collapsed into 2 domains: relationships between physicians and nurses and relationships between nurses and administration (Table 8).

Table 8. Relationships between physicians and nurses domain*

Item	Strongly agree and Somewhat agree	Somewhat disagree and Strongly disagree
	B2. Physicians and nurses have good working relationships	88.1

Item	Strongly agree and Somewhat agree	Somewhat disagree and Strongly disagree
B13. Physicians recognize nurses' contributions to patient care	77.8	22.2
B19. A lot of team work between nurses and physicians	77.7	22.3
B22. Physicians respect nurses	84.1	15.9
B28. Collaboration between nurses and physicians	80.0	20.0
B32. Physicians value nursing observations and judgments	80.0	20.0

** More detailed data are provided in Appendix 4*

The data on relationships between nurses and physicians reflects the true culture created at NMMC. Most nurses are young coming to work at NMMC shortly after graduating from nursing college. According to NMMC clinical and managerial leadership it frees them from influences of cultures in other hospitals and more flexible in adapting to NMMC environment.

Freedom to make important decisions, certain independence from supervisory staff, and empowerment to introduce changes in nursing aspects of hospital functioning were evaluated rather high by study participants (Table 9). It is difficult to judge how candid the nurses were in answering these questions regardless of efforts to assure them of anonymity. The interesting finding was that half of participants considered their salary as satisfactory, which may influence nurses' satisfaction with current position and/or being a nurse.

Table 9. Relationships between nurses and administration*

Item	Strongly agree and Somewhat agree	Somewhat disagree and Strongly disagree
B4. A supervisory staff that is supportive of nurses	86.1	13.9
B5. A satisfactory salary	50	50
B7. Opportunity for nurses to participate in policy decisions	61.4	38.6
B8. Support for new and innovative ideas about patient care	61.4	38.6
B11. A nurse manager who is good manager and leader	86	14
B12. A chief nursing officer who is highly visible and accessible to the staff	90.5	9.5
B15. Freedom to make important patient care and work decisions	72.1	27.9
B18 A chief nursing officer is equal in power and authority to other top level hospitals executives	77.3	22.7
B24. A nurse manager who backs up the nursing staff in decision making, even if the conflict is with a physician	86	14
B25. Administration that listens and responds to employee concerns	55.5	45.5
B27. Staff nurses are involved in the internal governance of the hospital (practice and policy committees)	45.2	54.8
B29. Staff nurses have the opportunity to serve on hospital and nursing committees	63.6	36.4

Item	Strongly agree and Somewhat agree	Somewhat disagree and Strongly disagree
B31. Nurse managers consult with staff on daily problems and procedures	66.7	33.3

* Data are presented in percentages

4.3. Burnout Inventory

Burnout Inventory incorporated two indicators: overall burnout score and emotional exhaustion score that were analyzed according to the guidelines provided by PCHOPR (Appendix 3). Details on nurses' responses about job related feelings are provided in Appendix 5. Data were analyzed in a way that higher scores indicate higher level of emotional exhaustion. Analysis of emotional exhaustion rates across NMMC units showed no difference in both overall burnout score ($p=.186$) and emotional exhaustion score ($p=.286$). However, failure to detect significant difference in emotional exhaustion across departments could be due to small number of participants in each hospital unit.

As a desirable benchmark for hospital functioning it was hypothesized that the emotional exhaustion and burnout inventory scores should be no more than 20% of maximum score. The comparison of NMMC data and the maximum possible scores for total burnout and emotional exhaustion indicated that NMMC had higher than expected percentages of emotional exhaustion and total burnout scores (Table 10).

Table 10. Comparison of NMMC with the maximum possible scores for emotional and burnout indicators

Index	NMMC score	Max score	Observed Correspondence %	Expected correspondence %	P-value*	95% CI** Lower bound	Upper bound
Total burnout score	54.5	154	35.4	No more than 20% (30.8)	.000	18.23	29.11
Emotional exhaustion score	25.7	63	40.8	No more than 20% (12.6)	.000	9.45	16.72

* When comparing observed correspondence with the expected one

** CI – Confidence interval

Table 11 shows that NMMC had the highest emotional exhaustion scores than any other surveyed hospital in Armenia and Russia. Moreover, the difference was statistically significant.

Table 11. Job-related emotional exhaustion indicators

Emotional exhaustion indicators*	NMMC	Emergency hospital	“Erebouni” hospital	CCH	Hospital #122
Overall burnout score	54.5 (sd 18.1)	22.5 [†] (sd 15.5)	27.4 [†] (sd 13.2)	25.9 [†] (sd 15.2)	31.0 [†] (sd 17.3)
Emotional exhaustion score	25.7 (sd 12.1)	6.9 [†] (sd 8.7)	12.2 [†] (sd 9.8)	15.9 [†] (sd 9.6)	19.5 [†] (sd 10.5)

* All the cases containing at least one missing are excluded

[†] Significant difference, $p \leq 0.001$ (one samples t-test)

Further, findings of this study were compared with that of US Magnet hospitals. NMMC nurses were significantly more exhausted than nurses in other surveyed hospitals ($p < .001$). However, difference in the emotional exhaustion score was not statistically significant between NMMC and US Magnet hospital nurses ($p = .917$) (Table 12).

Table 12. Comparison of Emotional Exhaustion score with that from US Magnet hospitals

	NMMC Mean±std (n=45)	ANCC Magnet hospitals, US Mean±std
Emotional Exhaustion score*	25.7±12.1	21.50±10.16

* All the cases containing at least one missing are excluded

4.4. Job satisfaction

The survey revealed satisfaction level of NMMC nurses with the present job and the nursing profession in general. As it is evident from Table 13, the majority of nurses at NMMC were either moderately satisfied or a little dissatisfied satisfied with their present job. The same pattern of answers was indicated for respondents' satisfaction with being a nurse.

Table 13. Satisfaction with current job and profession as a nurse

Item	Hospital (n)	Very satisfied % (n)	Moderately satisfied % (n)	A little dissatisfied % (n)	Very dissatisfied % (n)
On the whole, how satisfied are you with your present job?	NMMC (45)	17.8 (8)	48.9 (22)	33.3 (15)	0
	Emergency hospital (140)	36.4 (51)	37.1 (52)	23.6 (33)	2.9 (4)
	“Erebouni” hospital (256)	20.7 (53)	39.1 (100)	33.2 (85)	7.0 (18)
	CCH (247)	13.8 (34)	69.2 (171)	14.6 (36)	2.4 (6)
	Hospital #122 (211)	16.6 (35)	65.9 (139)	13.7 (29)	3.8 (8)
How satisfied are you with being a nurse?	NMMC (44)	40.9 (18)	45.5 (20)	11.4 (5)	2.3 (1)
	Emergency hospital (142)	66.2 (94)	24.6 (35)	7.7 (11)	1.5 (2)
	“Erebouni” hospital (256)	37.5 (96)	42.9 (110)	15.2 (39)	4.4 (11)
	CCH (245)	41.6 (102)	48.2 (118)	6.1 (15)	4.1 (10)
	Hospital #122 (211)	32.2 (68)	51.7 (109)	11.8 (25)	4.3 (9)

To compare findings of this survey with that previously conducted in five countries, Job Satisfaction variable was recoded into a new dichotomous variable, named Job Dissatisfaction (Appendix 3), where the higher score indicated higher dissatisfaction with present job. Job dissatisfaction at NMMC was not different from that in Emergency and Erebouni Hospitals, but it was significantly higher in comparison to the hospitals in Moscow and St. Petersburg (Table 14).

Table 14. Job dissatisfaction proportion at NMMC and four research sites

	NMMC (n=45)	Emergency hospital (n=140)	Erebouni hospital (n=256)	CCH (n=247)	Hospital #122 (n=211)	ANCC Magnet hospitals, US
Job dissatisfaction	33.3%	26.4%	40.2%	17.0%*	17.5%*	16.3%*

* $p < 0.05$ (*z*-test comparing proportions from research sites to that from NMMC)

Job dissatisfaction at NMMC was compared to data from the ANCC Magnet hospitals in US. Significantly higher dissatisfaction with own job was detected at NMMC than in the ANCC Magnet hospitals (Table 14).

An analysis was carried out to detect the association of burnout score with job dissatisfaction. Not surprisingly, nurses who were dissatisfied with their current position had significantly higher emotional exhaustion score than the nurses who were moderately or very satisfied (Table 15).

Table 15. Difference in the total emotional exhaustion score among NMMC nurses depending on satisfaction with current position

Mean (moderately or very dissatisfied)	Mean (very or moderately satisfied)	Mean difference	Sig. level
32.0 (sd=10.29)	20.53 (sd=13.29)	9.47	.012

4.5. Plans to leave

The questionnaire was intended to reveal the likelihood that nurses would leave or would lose their job. Proportion of nurses considering that losing their work during the next 12 months was very or fairly likely was the lowest when comparing to the research sites in Armenia (Table 16). Further, none of nurse at NMMC stated that they plan to leave current job in coming 6 months and the majority of nurses (73.3%) had no plans to leave it at all. At all three surveyed hospitals in Armenia, the perceived difficulty in finding another acceptable job was higher than in research settings in Russia. At NMMC, proportions of response options were similarly distributed as at the other two hospitals in Armenia (Table 16).

Table 16. Plans of surveyed nurses to leave their current jobs per each research sites

Items	Hospital	Response options (%)			
		<i>Very likely</i>	<i>Fairly likely</i>	<i>Not too likely</i>	<i>Not at all likely</i>
Likelihood of losing job during the next 12 months	NMMC	4.4	4.4	51.1	40.0
	Emergency H.	8.5	4.9	28.2	58.5
	“Erebouni” H.	18.8	22.3	46.5	12.5
	CCH	3.7	5.3	41.1	50.0
	Hospital #122	2.9	7.7	44.5	45.0
Plans to leave present nursing position	NMMC	0	4.4	22.2	73.3
	Emergency H.	0.7	3.5	9.2	86.6
	“Erebouni” H.	1.6	2.3	27.7	68.4
	CCH	4.1	8.2	42.8	44.9
	Hospital #122	2.4	9.1	45.5	43.1

Items	Hospital	Response options (%)			
		<i>Very easy</i>	<i>Fairly easy</i>	<i>Fairly difficult</i>	<i>Very difficult</i>
How easy or difficult would be finding an acceptable job in nursing	NMMC*	4.7	14.0	48.8	32.6
	Emergency H.	7.1	11.3	41.8	33.7
	“Erebouni” H.	2.4	10.6	54.1	32.9
	CCH	20.9	38.5	35.6	5.0
	Hospital #122	12.0	35.1	38.9	13.9

* Percentage is calculated excluding missing cases

Plans to leave current position variable was recoded into dichotomous to compare findings of this study with that of conducted in other hospitals in Armenia and Russia, as well as in US ANCC Magnet hospitals (Appendix 3). Data analysis indicated that the proportion of NMMC nurses who have planned to leave their current position in the next 6-12 months was the highest among hospitals surveyed in Armenia (Table 17). However, it was lower than for nurses working in Russia hospitals and ANCC Magnet hospitals in US. Statistically significant difference in proportion of nurses planning to leave their current position in the next 6 or 12 months was indicated between NMMC and Russian hospitals ($p < .05$) and the ANCC Magnet hospitals ($p < .000$).

Table 17. Nurses’ plans of leaving their present position at NMMC, across the research sites and the US Magnet hospitals*

	NMMC (<i>n</i> =45)	Emergency hospital, (<i>n</i> =142)	Erebouni hospital (<i>n</i> =256)	CCH (<i>n</i> =247)	Hospital #122 (<i>n</i> =209)	ANCC Magnet hospitals
Plans to leave the present position	4.4%	4.2%	3.9%	12.3% [†]	11.5% [†]	45.0% [‡]

* *z*-test comparing proportions from NMMC with research and US hospitals

[†] Significant difference $p < 0.05$

[‡] Significant difference $p < 0.000$

Among those nurses who had no plans to leave job in the next 6-12 months, 80.5% stated that it is fairly or very difficult to find another acceptable job (Table 18).

Table 18. Plans to leave the job and perceived difficulty to find another acceptable job among surveyed nurses at NMMC

		Plan to leave job		Total
		<i>No plans within the next year</i>	<i>Plans within the next 6-12 months</i>	
Difficulty with finding another acceptable job	<i>Very or fairly easy</i>	19.5% (8)	0	18.6% (8)
	<i>Fairly or very difficult</i>	80.5% (33)	100% (2)	81.4% (35)
Total		100% (41)	100% (2)	100% (43)

4.6. Perception of the quality of nursing care

Perceived quality of nursing care incorporated several questions. Majority of nurses at NMMC evaluated the quality of nursing care provided in their own units as excellent or good (86.7%). Most of NMMC nurses were somewhat confident that patients are able to manage their care after discharge

(70.5%). However, the proportion of nurses feeling very confident about patients' well-being after discharge was the lowest at NMMC when comparing to other hospitals in Armenia and Russia. The highest proportion of pessimistic view about addressing nurse-reported patient problems by hospital management was detected at NMMC as compared to Emergency and Erebouni hospitals (Table 19).

Table 19. Quality of nursing care at NMMC and other hospitals in Armenia and Russia

Item	Hospital	Response options (%)			
		<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>
Quality of nursing care in own units	NMMC	37.8	48.9	13.3	0
	Emergency H.	54.2	33.8	10.6	1.4
	“Erebouni” H.	34.8	49.6	15.6	0
	CCH	39.7	47.0	13.0	0.4
	Hospital #122	34.0	49.3	16.3	0.5
		<i>Very confident</i>	<i>Confident</i>	<i>Somewhat confident</i>	<i>Not at all confident</i>
Patients are able to manage their care after discharge	NMMC	2.3	18.2	70.5	9.1
	Emergency H.	12.1	47.5	34.8	5.7
	“Erebouni” H.	7.4	35.0	54.5	3.1
	CCH	6.8	43.6	42.4	7.2
	Hospital #122	8.0	35.7	49.7	6.5
		<i>Very confident</i>	<i>Confident</i>	<i>Somewhat confident</i>	<i>Not at all confident</i>
Management addresses nurse-reported patient care problems	NMMC	14.6	29.3	39.0	17.1
	Emergency H.	26.2	41.8	25.5	6.4
	“Erebouni” H.	10.1	33.9	45.1	10.9
	CCH	6.1	25.4	41.0	27.5
	Hospital #122	8.0	24.5	48.0	19.5

Rating quality of nursing care and patients' abilities to manage their own care after discharge at NMMC were compared with that of each hospital in Armenia, Russia and data from the US, NHS Trust Surveyed in 1999. Prior to this analysis Q.D.8 and D.9 were recoded into dichotomous variables to facilitate fair comparison among hospitals (Appendix 3). Statistically significant difference in perception of quality of nursing care was detected between NMMC and Emergency hospital ($p = .03$). However, the nurses' perception of patients' ability to manage their own care after discharge was statistically lower at NMMC than in every hospital in Armenia and Russia, as well as in comparison to US, National Health Services (NHS) Trust surveyed in 1999 (Table 20).

Table 20. Perception of nursing care quality at NMMC, across research sites and in comparison with the NHS Trusts surveyed in 1999, US

Item rating	NMMC (n=45)	Emergency hospital (n=142)	“Erebouni” hospital (n=256)	CCH (n=247)	Hospital #122 (n=209)	US, NHS Trusts surveyed in 1999
Quality of care ‘excellent’	37.8	54.2 [‡]	34.8	39.7	34.0	29.3
Patients' ability to manage their own care ‘very confident’ & ‘confident’	20.5	59.6 [‡]	42.4 [‡]	50.4 [‡]	43.7 [‡]	59.7[‡]

* z-test comparing proportions from NMMC with research and US hospitals

[†] significant difference $p < 0.05$

[‡] significant difference $p \leq 0.001$

Nurses were asked about the quality of care provided at NMMC compared to that one year ago. None of them stated that the quality of care in the hospital has been deteriorated, in contrast to other hospitals in Armenia and Russia, although the percentage of such answers in each of these hospitals was small. Proportion of nurses stated that the quality of care at NMMC was improved in comparison with the past year was higher than in CCH and Hospital #122, Russia, but it was lower when compared to both hospitals in Yerevan (Table 21).

Table 21. Quality of care over the past year at NMMC and other surveyed hospitals*

Response	NMMC (n=44)	Emergency (n=141)	“Erebouni” (n=257)	CCH (n=245)	Hospital #122 (n=200)
Improved	54.5	72.3	80.9	18.8	53.5
Remained the same	45.5	25.5	17.5	63.3	44.5
Deteriorated	0	2.1	1.6	18.0	2.0

* Data are presented in percentages

According to data analysis instructions provided by PCHOPR, Quality of care in the hospital item was recoded into Care improvement dichotomous variable (Appendix 3). Perceived quality of care was statistically higher at NMMC than in CCH in Moscow ($p=.001$) and NHS Trust Survey in some US hospitals ($p<.001$) (Table 22).

Table 22. Quality of care over the past year at NMMC and other surveyed hospitals

Care improvement	NMMC (n=44)	Emergency (n=141)	“Erebouni” (n=257)	CCH (n=245)	Hospital #122 (n=200)	US, NHS Trust Survey, 1999
Yes	54.5	72.3*	80.9*	18.8*	53.5	20.1*

* z-test comparing proportions from research site with NMMC data ($p<.05$)

Data analysis indicated that almost all nurses would recommend their family member to receive care at NMMC, if needed (97.8%). This finding was similar across hospitals in Yerevan, but it was significantly higher than in the hospitals in Russia (Table 23).

Table 23. Recommending their family member to be treated at their hospital (Q. D. 11)

Reply	NMMC (n=45)	Emergency (n=141)	“Erebouni” (n=257)	CCH (n=243)	Hospital #122 (n=204)
Yes	97.8	97.9	98.4	81.5*	90.7*

* $p < .05$

The frequencies of job related negative incidences happened with nurses or patients over the past year were grouped into two options. One was assigned value of 1 and included “occasionally” and “frequently” responses, while the other was given 0 value and included “never” and “rarely” responses. The most frequently reported incident by nurses at NMMC were nosocomial/wound infection in patients, which were followed by verbal abuse directed toward nurses, and complaints received from patient and/or their family members. Patient falls with injuries have never happen at NMMC contrary to other hospitals (Table 24).

Statistically significant difference was detected in the rate of nosocomial/wound infections in patients between NMMC and any other hospital surveyed in Yerevan and Russia, whereas the incidence of

verbal abuse directed toward nurses was significantly higher at NMMC than in Emergency Hospital ($p<.05$).

Table 24. Job-related incidents*

	NMMC (<i>n</i> =45)	Emergency hospital (<i>n</i> =140)	“Erebouni” hospital (<i>n</i> =255)	CCH (<i>n</i> =244)	Hospital #122 (<i>n</i> =205)
Patients received wrong medication/dosage	4.7	3.6	0.4	3.3	6.8
Nosocomial/wound infections	65.9	8.5 [†]	12.2 [†]	4.7 [†]	4.0 [†]
Complaints from patients	23.3	11.3	11.8	9.7 [‡]	14.8
Patient falls with injuries	0	6.3	2.4	5.1	4.9
Work-related injuries of staff	18.2	7.1	20.7	9.6	8.3
Verbal abuse toward nurses	37.8	19.3 [‡]	32.7	24.7	25.2

* Proportions (%) of those nurses who answered “frequently” or “occasionally” to the given items

[†] NMMC significantly differed from that particular hospital, $p<0.001$

[‡] NMMC significantly differed from that particular hospital, $p<0.05$

More than half of the nurses (72.7%) stated that they were stuck with a needle or sharp instruments that was used on a patient in contrast to the other hospitals (Table 25). Nurses were asked about the frequency of these incidences per nursing career, in the past year, and in the past month. About half of the nurses (56%) mentioned that this occurred during their nursing career. Among them 41.1% reported being stuck one-two times, and only one person reported being stuck up to 10 times.

Table 25. Incidence of being stuck with a needle or sharp

	NMMC	Emergency hospital	“Erebouni” hospital	CCH	Hospital #122
Nurses have been stuck with a needle or sharp that had been used for a patient	72.7%	26.4%	47.1%	45.5%	46.6%
Mean number of being stuck with a needle (mean ± standard deviation):					
During nursing career	1.44±2.1	29.7±139.3	8.3±22.7	2.8±3.0	3.5±4.4
In the past year	0.56±1.1	7.4±16.2	3.1±7.7	1.2±1.7	1.5±1.7
During the last month	0.16±0.4	0.9±2.7	0.8±1.7	0.2±0.6	0.2±0.6

4.7. Characteristics of the last full shift

The most frequently reported types of the last shift mentioned by NMMC nurses were 24-hour and day shift. This finding was similar to that from other research sites previously surveyed (Table 26).

Table 26. Type of the last shift worked at NMMC and per research sites

	NMMC (%) (<i>n</i> =45)	Emergency hospital (%) (<i>n</i> =140)	“Erebouni” hospital (%) (<i>n</i> =255)	CCH (%) (<i>n</i> =245)	Hospital #122 (%) (<i>n</i> =202)
Day	25.6	21.4	38.0	35.9	49.5

	NMMC (%)	Emergency hospital (%)	“Erebouni” hospital (%)	CCH (%)	Hospital #122 (%)
Evening	0	0.7	1.6	0.8	4.5
Night	7.0	5.7	13.3	4.9	5.9
24 hours	67.4	72.1	47.1	58.4	40.1

The mean number of patients in a given unit during the last shift and the mean number of patients assigned to each nurse during the last shift was analyzed. Nurses having managerial position are responsible for whole unit(s), which influenced the mean number of patients assigned to each nurse. Of four nurses specifying their current position as a nurse manager, only two responded to these questions, one of which mentioned being responsible for all 46 patients in the unit. In addition, five nurses working in clinics (n=6) misunderstood these questions, assuming that they were related only to nurses working in the wards, ICU, and other units with inpatients and skipped these questions. Thus, in order to have a valid data on the mean number of patients in a given unit and assigned to each nurse the answers of nurse managers and nurses working in ambulatories were excluded. From the remaining 36 nurses only two did not answer to these questions. Further analyses showed that both the mean number of patients in a unit and assigned to each nurse were significantly different between NMMC and other research sites (Table 27).

The difference in the mean number of patients assigned for each nurse was statistically different across hospital units (p=.004), but small sample size did not allow identifying those particular units for which this difference was significant.

Table 27. Mean numbers of unit patients* and those assigned to participants during their last shift (excluding nurse managers and nurses working in ambulatories)

	NMMC (n=34)	Emergency hospital (n=140)	“Erebouni” hospital (n=255)	CCH (n=236)	Hospital #122 (n=182)
Number of patients in a unit	9.29±4.95	20.0±10.4**	15.9±9.9**	15.8±16.6**	36.3±40.0**
Number of patients assigned to a nurse	5.97±3.87	11.8±8.5**	10.7±8.6 [†]	11.2±8.8**	19.9±15.0**

* Mean ± standard deviation

** Statistically significant difference between NMMC and the other sites (p<0.001)

[†] Statistically significant difference between NMMC and the other sites (p<0.01)

Further, nurses ranked patients assigned to them during the last shift according to the severity of illnesses/health status (Table 28). Very severely ill patients had the lowest proportion (7.4%), which was followed by rather severely ill patients (18.3%) and by least severely ill patients (74.3%). Distribution of patients by the degree of severity at NMMC was similar to that in the other research sites in Armenia and Russia.

Table 28. Proportions of patients with different degree of severity assigned to a nurse during a shift at NMMC and across the four research sites

Degree of severity	NMMC	Emergency hospital	“Erebouni” hospital	CCH	Hospital #122
Very severely ill	7.4%	9.1%	7.3%	8.5%	6.0%

Degree of severity	NMMC	Emergency hospital	“Erebouni” hospital	CCH	Hospital #122
Rather severely ill	18.3%	15.2%	15.9%	13.5%	11.4%
Least severely ill	74.3%	75.7%	76.8%	78.0%	82.6%

Nurses were asked to indicate those tasks that they performed during the last shift. Delivering/retrieving food trays, performing routine phlebotomy, and housekeeping duties were the least frequently mentioned by NMMC nurses, while starting IVs, arranging discharge referrals, and transporting of patients were performed by the majority of nurse. The Armenian sites were similar to each other with regard to tasks performed during the last shift, except for delivering/retrieving food trays and housekeeping duties (Table 29).

Table 29. Tasks conducted by nurses during their last shift at NMMC and across hospitals

Tasks	NMMC (%)	Emergency hospital (%)	“Erebouni” hospital (%)	CCH (%)	Hospital #122 (%)
Delivering/retrieving food trays	9.8	8.6	9.7	28.2	39.6
Ordering/performing ancillary services	51.2	48.2	34.2	53.4	65.8
Starting IV-s	85.4	85.6	73.5	59.7	64.9
Arranging discharge referrals	73.2	59.0	45.5	43.3	32.2
Performing ECG-s	36.6	36.0	37.7	23.9	22.3
Routine phlebotomy	4.9	2.9	3.9	5.9	15.8
Transporting of patients	61.0	53.2	35.8	46.2	47.5
Housekeeping duties	14.6	36.0	43.2	45.4	30.7
None of the above	2.4	0.7	8.2	11.8	11.4

The nursing survey included questions on tasks that nurses were unable to perform during their last shift due time restrictions. The most frequently reported activities remained undone were back rubs and skin care and oral hygiene, which followed by comforting/talking with patients and developing/updating nursing care plan (Table 30). Surveyed hospitals were heterogeneous in proportions of different tasks left undone due to time shortage during the last shift.

Table 30. Undone tasks due to time shortage at NMMC and across other research sites

Undone tasks	NMMC (%)	Emergency hospital (%)	“Erebouni” hospital (%)	CCH (%)	Hospital #122 (%)
Routine teaching explanations for patients	21.2	29.0	19.8	21.6	27.8
Prepare patients and families for discharge	15.2	29.0	15.9	11.6	14.8
Comforting/talking with patients	24.2	30.5	21.0	18.4	18.9
Adequately documenting nursing care	15.2	19.8	12.7	7.9	13.0
Back rubs and skin care	33.3	23.7	12.7	7.4	21.3
Oral hygiene	33.3	19.1	11.1	6.8	16.0
Develop or update nursing care plans	24.2	21.4	15.1	8.4	12.4
None of the above	42.4	38.5	57.1	62.1	42.4

The quality of nursing care delivered during the last shift was ranked as good by the majority of NMMC nurses (62.5%). Similar evaluation/perception was indicated in the other research sites, except for Emergency hospital. In all surveyed hospitals none of nurses assessed the quality of nursing care during the last shift as poor (Table 31).

Table 31. Quality of nursing care during last shift at NMMC and across the research sites

Rating	NMMC (%)	Emergency hospital (%)	“Erebouni” hospital (%)	CCH (%)	Hospital #122 (%)
Excellent	20.0	46.4	28.9	34.5	31.7
Good	62.5	41.4	55.9	53.8	59.1
Faire	17.5	12.1	14.8	11.8	9.1

Most nurses at NMMC stated that they would recommend a nursing career to their relatives and friends, even though many of them would do it with some reservations (Table 32). Nonetheless, the percentage of nurses who would not recommend nursing career to a family member or a friend was higher at NMMC as comparing to the other two hospitals in Armenia and the hospital in St. Petersburg.

Table 32. Recommending a career in nursing to a family member*

	NMMC	Emergency hospital	“Erebouni” hospital	CCH	Hospital #122
No	22.2	2.8	13.2	38.7	3.9
Yes, with some reservation	42.2	37.3	53.3	46.8	50.9
Yes, without reservation	35.6	59.2	33.1	13.3	4.2

* Data provided in percentages

Recommending a career in nursing to a family member and satisfaction with being a nurse items were recoded into dichotomous variables to find the association between these items. Responses “yes, with and without some reservations” were collapsed into value 1 in dichotomous variable, whereas 0 value was assigned to the response “no”. Satisfaction with being a nurse was recoded into new variable that had value of 1 (moderately and very satisfied) and 0 value (very and a little dissatisfied). Fisher exact test was performed to detect possible association between satisfaction with being a nurse and recommending a career of a nurse to a family member. The degree of satisfaction with being a nurse was positively correlated with recommending a career in nursing to a family member ($p < .000$).

5. Discussion

The survey assessed the current status of nursing care at NMMC and compared it with nursing care provided in the other surveyed hospitals in Armenia and Russia.

The participation rate was lower at NMMC as compared to other health care facilities surveyed in Armenia and Russia. One possible reason for this low response rate was the less structured/formal survey administration at NMMC. At the other sites, the nurses attended survey completion sessions in groups under the supervision of their hospital head nurses and interviewers (4). At NMMC nurses were given one week to complete the questionnaires, which excluded daily workload and time

limitation of nurses as possible reasons for low response rate. Possibly, the reason for low response rate could be reluctance and disbelief of personnel toward expressing work related concerns and positive changes in hospital functioning. During data collection stage, the study team faced the nurses' concerns regarding the possibility of identifying their personality by linking their age, the unit, number of years worked in the current unit, etc despite continuing attempts to persuade nurses of the confidentiality of their information. However, NMMC nurses appear to have been more openly critical in answering sensitive questions than those working in Emergency and Erebouni hospitals.

The survey indicated that NMMC had significantly higher score for nurse competence when comparing to the hypothesized value. The other nursing work indicators were lower than the hypothesized values, but the difference was significant for Nursing Work Index (NWI) and Nurse staffing only. The reason for not detecting significant difference could be the small sample size of the study and, possibly, biased attitude of study participants while completing the questionnaire.

NWI, nurses autonomy, control over their own work, relationships with doctors, nurse staffing, administrative support, career support, nurse competence, and doctors' value of nursing work were found to be the lowest at NMMC in comparison with the Armenian research sites. Taking into consideration the better working environment at NMMC, these findings support the idea that nurses at NMMC were more open and critical in answering to the questionnaire than those from other two Armenian hospitals. Interestingly, "relationships with doctors" indicator was significantly higher at NMMC comparing to ANCC Magnet hospitals, US. The possible explanation for this finding is that NMMC is a small tertiary care hospital with personnel consisted of 70 nurses and 60 other clinical staff members, so that somewhat closer working relationships could be expected between doctors and nurses.

Although NMMC score for administrative support was not different from the hypothesized value, analysis of each item reflecting relationships between nurses and administration revealed that changes should be made to improve the organizational support at NMMC. According to the survey results, approximately only half of nursing staff had been somehow involved in hospital governance and decision-making committees or has received a support on behalf of administration for innovative ideas related to patient care or work in general. Nurses' satisfaction with their current work and performance can be improved by empowering them to participate in decision-making related to nursing care management.

Data analysis indicated that NMMC had significantly higher than the hypothesized emotional exhaustion and burnout scores. Moreover, NMMC had the highest total burnout score and emotional exhaustion score across surveyed hospitals in Armenia and Russia. Currently, NMMC performs about 600-700 cardiac surgeries and about 1000 invasive procedures per year, which put significant stress on nurses. Working hours in cardiac catheterization laboratory and Intensive Care Unit (ICU) depend on daily workload, so that nurses may stay in the hospital for far more than 8 hours per day. Majority of nurses has 24-hour scheduled shift, which may contribute to such high scores of emotional exhaustion and burnout scores. In addition to a long working day at the hospital, high emotional exhaustion score at NMMC can be explained by the complexity of treatment procedures performed at NMMC, such as cardiac invasive procedures and open- or closed heart surgeries. Emotional exhaustion and burnout scores were not different across department at NMMC, thus it could be assumed that all departments at NMMC have high workload. In deed, patients are scheduled every 15 minutes in ambulatories,

whereas the length of regularly scheduled shift in wards is mainly 24 hours, so it was expected that the total burnout and emotional exhaustion scores could be so high at NMMC. Nonetheless, data on the mean number of patients in a unit and the average number of patients assigned to a single nurse was the lowest at NMMC in comparison with other surveyed hospitals in Armenia and Russia, so that high level of emotional exhaustion could not be explained only by inadequate patient-to-nurse ratio at NMMC. The distribution of patients with different degree of disease severity was similar at NMMC and other hospitals. However, criteria used to differentiate degree of patient severity by nurses in different hospitals is unknown judgment, which could jeopardize fair interpretation of nurses' workload in various hospitals in terms of severity of a disease. To have baseline data for future improvement activities it would be useful to conduct a qualitative research aiming to reveal underlying causes of nurses' emotional exhaustion at NMMC.

High score of emotional exhaustion and burnout inventory could contribute to nurses' dissatisfaction with their job. The percentage of nurses dissatisfied with their current job was higher at NMMC than in Emergency hospital and the research sites in Russia, but lower than at Erebouni hospital. Job dissatisfaction at NMMC was significantly higher when comparing to that in the ANCC Magnet Hospitals. Considering the high percentage of job dissatisfaction among nurses, it was reasonable to assume that the percentage of nurses planning to leave their present position in the next 6-12 months would be also high. The proportion of nurses who were planning to leave their current position at NMMC was higher than in the other two hospitals in Armenia. However, this percentage was significantly lower at NMMC than in Russian hospitals and Magnet hospitals in US. High proportion of nurses who had no plans to leave their current work could be explained by having difficulties with finding another acceptable job reported by nurses in Armenian research sites. A good lesson that was learned from this study is that there was no difference in plans to leave current position or the likelihood of losing job between nurses under the age of thirty versus those who were over thirty. Moreover, the proportion of younger nurses was higher at NMMC than in the US hospitals, while this is a group of employees who have a potential in nursing career and professional grow [1]. Further, about two third of NMMC nurses would recommend their relative or a friend perusing nursing career with or without some reservations. Recommending a career of a nurse to a family member was positively correlated to respondents' satisfaction of being a nurse.

Rating quality of nursing care at NMMC was significantly lower than in Emergency and Erebouni hospitals and was similar to that in CCH, #122 Hospital, as well as the results of NHS, US. Besides, the percentage of nurses confident in patients' abilities to manage their own care after discharge was surprisingly the lowest at NMMC among all surveyed health care facilities. It should be noted that patients are discharged from NMMC at the time when their health and functional status are appropriate for leaving the hospital. Some patients may feel uncomfortable and unprepared to leave the hospital and manage their own care at home, which is a psychological rather than physical health issue in such cases. To ensure well-being of its patients NMMC has established a policy, according to which all patients are informed about their readiness to be discharged by their physician, but are allowed to stay in the hospital as long as they and their caregivers believe in safety of being outside of direct medical supervision. One of the possible explanations for nurses' pessimism could be the fact that most of the patients had cardiac surgery or invasive procedure and, thus, their condition was perceived by nurses as severe. The severity of a patient's condition does not appear to be related to a nurse's confidence, as the distribution of patients by severity was similar across all the facilities. So, the reasons for low confidence in patients' well-being after discharge should be further investigated.

About the half of nurses at NMMC reported improved quality of care comparing to that a year ago. It should be noted that the implementation-directed part of Quality Assurance Project was initiated in November 2001 under the aegis of American University of Armenia – Nork Marash Medical Center Project. Although it is impossible to attribute the improvements of quality of care at NMMC to solely to the implementation of ANP, the latter could play a role in higher rating nurses gave to quality of care at NMMC. Although higher percentages of nurses evaluated the quality of care provided at Erebouni and Emergency hospitals as improved, it is possible that these nurses intentionally exaggerated their positive responses due to some attitudinal characteristics of middle level health care providers in Armenia who are more dependent from higher management level than those in the western world. Further, the overwhelming majority of nurses at NMMC would recommend receiving care at their hospitals to their relatives and friends. This finding supported nurses' evaluation of quality of care provided at NMMC.

The most frequently occurring incident related to patient care was nosocomial/wound infection. Open-heart surgery is one of the major surgeries that has a high rate of perioperative complications, such as stroke, renal failure, death and, especially, nosocomial infections. However, an Infection Control Program is implemented at NMMC to collect and analyze patient-level data for undertaking appropriate measures to reduce post-operative complication rates. The Program has proved to be successful [personal communication with NMMC staff]. By frequency, the next problem reported by nurses was verbal abuse toward nurses. Unfortunately, the questionnaire was not designed in a way to reveal from what side the verbal abuse was directed toward nurses.

NMMC was the only hospital among surveyed that did not reported patient falls with injuries. On the other side, the incidence of being stuck with a needle or sharp that had been used for patient was the highest at NMMC. It should be noted that the number of nurses answered positively (32) to the general question about their experience with being stuck by a needle or sharp instruments was different from the number of nurses who indicated the actual number of such cases during their nursing career, last year or last month (23). The number of incidences could be different in those nurses who did not reported the actual number comparing to the nurses who stated the number of instances they were stuck by a needle or another sharp tool. Therefore, the mean number of being stuck with a needle indicated in this survey could be different if all nurses who answered positively to this question reported also the actual number of cases in a specified time-period.

In most health care facilities in Armenia delivering/retrieving food trays and housekeeping duties mainly are performed by cleaning ladies, whereas routine phlebotomy mainly is done by physicians at NMMC. This could explain the small proportion of nurses performing those activities at NMMC. The study revealed that 24.2% of nurses did not manage to update or develop nursing care plans. However, nurses in the Armenian health care system are more dependent from physicians than those in developed countries. Although efforts have been made to lessen excessive subordination between physicians and nurses, nursing care plan does not exist at NMMC and in many other Armenian hospitals.

In conclusion, key issues identified by nursing survey should be emphasized.

- The survey conducted at NMMC provided baseline data on strengths and possible areas for improvement of nursing care provided at NMMC.

- The survey provided the opportunity to compare status of nursing care at NMMC with that delivered in other hospitals in Armenia, Russia, and the ANCC Magnet hospitals in the US.
- The findings can be used to plan further activities that enhance nursing care and to improve the quality of care provided at NMMC.
 - Creating a Nursing Board to involve NMMC nurses in hospital governance and to make working relationships between nursing staff and administration more effective is suggested. This can increase nurses' interest in carrying out additional responsibilities related to planning, organizing, implementing, and monitoring quality and management of nursing care. It may also positively influence nurses' satisfaction with own work and their performance, possibly, contributing to health care outcomes.
 - Decrease nurses daily workload by having more adequate nurse staffing is suggested to positively influence on nurses' emotional exhaustion and burnout.
 - Post-intervention data collection can be used to evaluate the effectiveness of these activities.
- Presenting the survey results to NMMC nurses to alleviate their fear related to identification of individual participation and the following negative consequences of expressing work-related concerns is recommended.

6. References

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ՆՈՐՔ ՄԱՐԱՇ ԲԺՇԿԱԿԱՆ ԿԵՆՏՐՈՆ / ՀԱՅԱՍՏԱՆԻ ԱՄԵՐԻԿԱՆ ՀԱՄԱԼՍԱՐԱՆ



ԲՈՒԺՔՈՒՅՐԱԿԱՆ ՀԱՐՑՈՒՄ

Հարգելի բուժքույր,

Նորք Մարաշ Բժշկական Կենտրոնում իրականացվում է Բուժօգնության որակի բարելավման ծրագիր: Բուժքույրական գործը զորացնելու նպատակով մենք Ձեր օգնության կարիքն ունենք, որպեսզի պատկերացում կազմենք ՆԱԲԿ-ում բուժքույրական գործի դրվածքի մասին:

Դուք ազատեք հրաժարվել այս ուսումնասիրությանը մասնակցելուց, սակայն Ձեր կարծիքը շատ կարևոր է մեզ համար:

Խնդրում ենք հարցերին պատասխանել անկեղծ և անկաշկանդ: Հավատացնում ենք, որ Ձեր պատասխանները կպահվեն լիովին գաղտնի և անանուն: Ձեր անունը ոչ մի կերպ չի կապակցվի Ձեր տված պատասխանների հետ, ուստի և՛ որևէ ձևով չի ազդի Ձեր աշխատանքային փոխհարաբերությունների վրա:

Աշխատեք պատասխանել բոլոր հարցերին: Եթե Դուք չգիտեք տվյալ հարցի ճշգրիտ պատասխանը, ընտրեք պատասխանի այն տարբերակը, որը համարում եք ամենահավանականը:

Սույն Բուժքույրական ուսումնասիրությունը իրականացվել է 8 երկրներում, որը նախաձեռնել է ԱՄՆ-ի Փենսիլվանիայի Համալսարանը, իսկ Հայաստանում՝ «Էրեբունի» բժշկական կենտրոնում և «Շտապ օգնություն» հիվանդանոցում՝ Հայաստանի Ամերիկյան Համալսարանի ղեկավարությամբ:

A. Այս բաժնում առաջարկվում են հարցեր Ձեր՝ որպես բուժքրոջ, աշխատանքի մասին: Խնդրում ենք պատասխանել հարցերին՝ շրջանակի մեջ վերցնելով Ձեր ընտրած պատասխանի համարը, կամ, որտեղ անհրաժեշտ է, գրելով պատասխանը տրված տողի վրա:

1. Հիվանդանոցի ո՞ր բաժանմունքում եք աշխատում.

1. Իհնտենսիվ թերապիայի բաժանմունք
2. Հետվիրահատական բաժանմունք
3. Կաթետերիզացիայի լաբորատորիա
4. Այլ լաբորատորիաներ
5. Ամբուլատոր կլինիկա (Մեծահասակների, Մանկական, Առիթմոլոգ իսկան)
6. Այլ (նշել) _____

2. Ի՞նչ պաշտոն եք զբաղեցնում:

3. Քանի՞ տարի է, ինչ աշխատում եք. a) որպես բուժքույր _____ տարի
b) որպես բուժքույր ներկայիս բաժանմունքում _____ տարի

4. Որքա՞ն է Ձեր հերթափոխի տևողությունը սովորաբար:

1. 8 ժամ 2. 12 ժամ 3. 24 ժամ 4. Այլ (նշել) _____

B. Նշեք, խնդրեմ, թե որքանով եք համաձայն, որ հետևյալն առկա է Ձեր ներկայիս աշխատանքում: Արտահայտեք Ձեր համաձայնության աստիճանը՝ յուրաքանչյուր պնդման դիմաց նշելով () այն վանդակը, որը գ տնվում է Ձեր կարծիքին համապատասխանող սյունակում: Եթե Դուք չգ իտեք, թե ինչի մասին է խոսքը տվյալ պնդման մեջ, ընտրեք 4-րդ՝ «Ամենևին համաձայն չեմ» պատասխանը:

Համաձայն եք, արդյոք, որ հետևյալն առկա է Ձեր ներկայիս աշխատանքում.	Լիովին	Մասամբ	Մասամբ	Ամենևին
	համաձայն եմ 1	համաձայն եմ 2	համաձայն չեմ 3	համաձայն չեմ 4
1. Հիվանդանոցի տեխնիկա-սանիտարական ծառայություններն աշխատում են բավարար, այնպես որ Դուք կարողանում եք անհրաժեշտ ժամանակ հատկացնել հիվանդներին:				
2. Բժիշկները և բուժքույրերն ունեն լավ աշխատանքային փոխհարաբերություններ:				
3. Հնարավորություն ունեք աշխատելու մի բաժանմունքում, որտեղ հիվանդները ստանում են բարձր մասնագիտացված բուժօգնություն:				
4. Վերադաս անձնակազմն աջակցում է բուժքույրերին:				
5. Ձեր աշխատավարձը բավարար է:				
6. Հիվանդանոցում կանոնավորապես կազմակերպվում են կրթական ծրագրեր բուժքույրերի համար:				
7. Բուժքույրերը հնարավորություն ունեն մասնակցելու հիվանդի բուժման վերաբերյալ որոշումների կայացմանը:				
8. Բուժօգնության վերաբերյալ բուժքույրերի կատարած նորարարական առաջարկները անհրաժեշտ աջակցություն են ստանում ղեկավարության կողմից:				
9. Բավականաչափ ժամանակ և հնարավորություն կա այլ բուժքույրերի հետ քննարկելու հիվանդի խնամքի հետ կապված խնդիրները:				
10. Բուժքույրերի թիվը բավարար է, որպեսզի ապահովվի հիվանդների որակյալ բուժօգնությունն ու խնամքը:				
11. Բաժանմունքի ավագ բուժքույրը լավ կազմակերպիչ է և ղեկավար:				
12. Հիվանդանոցի գլխավոր բուժքույրը հարգված է և մատչելի անձնակազմի				

Համաձայն էք, արդյոք, որ հետևյալն առկա է Ձեր ներկայիս աշխատանքում.

Լիովին համաձայն եմ 1	Մասամբ համաձայն եմ 2	Մասամբ համաձայն չեմ 3	Ամենևին համաձայն չեմ 4
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համար:

13. Բժիշկները գ նահատում են բուժքույրերի դերը հիվանդների բուժման գ ործում:
14. Անձնակազմի թվաքանակը բավարար է, որպեսզի աշխատանքը կատարվի:
15. Առկա է բուժօգ նության և աշխատանքի վերաբերյալ կարևոր որոշումներ կայացնելու ազատություն:
16. Լավ կատարված աշխատանքը գ նահատվում է և գ ովաբանվում:
17. Ղեկավարությունն ակնկալում է բուժքրոջ աշխատանքի բարձր մակարդակ:
18. Հիվանդանոցի գ լիավոր բուժքույրն իր հեղինակությամբ և ազդեցությամբ համազոր է հիվանդանոցի մյուս ղեկավարներին:
19. Բժիշկներն ու քույրերը համազ ործակցում են թիմային աշխատանքի սկզբունքով:
20. Բժիշկները ցուցաբերում են բարձրորակ բուժօգ նություն:
21. Առկա է առաջխաղացման հնարավորություն:
22. Բժիշկները հարգ ուն են բուժքույրերին:
23. Առկա է համատեղ աշխատանքի հնարավորություն գ իտակ բուժքույրերի հետ:
24. Բաժանմունքի ավագ բուժքույրը սատարում է բուժքույրերին, մինչևիսկ եթե ընդհարումը բժիշկների հետ է:
25. Ղեկավարությունը լսում և արձագ անքում է աշխատողների մտահոգ ություններին:
26. Հիվանդանոցում գ ործում է բուժօգ նության որակի ապահովման հատուկ ծրագ իր:
27. Բուժքույրերը մասնակցում են հիվանդանոցի ներքին կառավարմանը (օրինակ՝ հիվանդանոցային տարբեր հանձնաժողովներում ընդգ րվելու միջոցով):
28. Բժիշկներն ու բուժքույրերը սերտորեն համազ ործակցում են:
29. Բուժքույրերը հնարավորություն ունեն ընդգ րվելու հիվանդանոցի

Չամաձա՞յն եք, արդյոք, որ հետևյալն առկա է Ձեր ներկայիս աշխատանքում.

Լիովին համաձայն եմ 1	Մասամբ համաձայն եմ 2	Մասամբ համաձայն չեմ 3	Ամենևին համաձայն չեմ 4
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- աշխատանքը կանոնակարգ ող հիվանդանոցային և բուժքույրական հանձնախմբերում:
30. Հիվանդների բուժման գ ործում բուժքույրերի ներդրումն արժանանում է համընդհանուր ճանաչման:
 31. Ավագ բուժքույրերը խորհրդակցում են անձնակազմի հետ ամենօրյա աշխատանքային խնդիրների մասին:
 32. Բժիշկները գ նահատում են բուժքույրերի դիտողություններն ու կարծիքները:
 33. Յուրաքանչյուր հիվանդի բուժքույրական օգ նությունն իրականացվում է ըստ բուժքրոջ կողմից կազմված և ժամանակին նորացվող գ ռավոր պլանի:
 34. Աշխատանքը կազմակերպվում է այնպես, որ ապահովվի հիվանդի շարունակական խնամքը, այսինքն՝ միևնույն բուժքույրը սպասարկի տվյալ հիվանդին:
 35. Առկա է հիվանդանոցային համակարգ ը լավ ճանաչող փորձառու բուժքույրերի միջավայրում աշխատելու հնարավորություն:

C. Այս բաժինը պարունակում է պնդումներ աշխատանքի հետ կապված ապրումների մասին: Եթե Դուք երբեք չեք ունեցել տվյալ ապրումը՝ նշեք այն վանդակը, որը գ տնվում է «Երբեք» սյունակում: Եթե ունեցել եք, նշեք (), թե որքան հաճախ եք ունեցել այդ ապրումը՝ ընտրելով տվյալ տողի այն վանդակը, որը գ տնվում է Ձեր ցանկացած հաճախականությունն արտահայտող սյունակում:

Ի՞նչ հաճախականությամբ.	Երբեք 1	Տարին մի քանի անգ ամ կամ քիչ 2	Ամիսը մեկ անգ ամ 3	Ամիսը մի քանի անգ ամ 4	Շաբաթը մեկ անգ ամ 5	Շաբաթը մի քանի անգ ամ 6	Ամեն օր
							7
1. Ես զգ ում եմ, որ հոգ եպես հյուժվել եմ իմ աշխատանքից:							

Ի՞նչ հաճախականությամբ.

Երբեք	Տարին մի քանի անգ ամ կամ քիչ	Ամիսը մեկ անգ ամ	Ամիսը մի քանի անգ ամ	Շաբաթը մեկ անգ ամ	Շաբաթը մի քանի անգ ամ	Ամեն օր
1	2	3	4	5	6	7
2. Աշխատանքային օրվա վերջում ես ինձ սպառված եմ զգ ում:						
3. Ես հոգ նույնը եմ զգ ում, երբ առավոտյան արթնանում եմ և գ իտակցում, որ ինձ սպասվում է ևս մեկ աշխատանքային օր:						
4. Ես կարողանում եմ հեշտությամբ հասկանալ, թե ինչ են մտածում կամ զգ ում իմ հիվանդները:						
5. Ես զգ ում եմ, որ երբեմն որոշ հիվանդների վերաբերվում եմ այնպես, ասես նրանք անշունչ առարկաներ լինեն:						
6. Ողջ օրը մարդկանց հետ աշխատելը տանջանք է ինձ համար:						
7. Ես մեծ հաջողությամբ եմ լուծում իմ հիվանդների հետ կապված խնդիրները:						
8. Ես զգ ում եմ, որ ուժասպառ եմ եղել իմ աշխատանքից:						
9. Ես զգ ում եմ, որ դրականորեն եմ ազդում այլ մարդկանց կյանքի վրա:						
10. Այս աշխատանքին անցնելուց ի վեր ես ավելի անտարբեր եմ դարձել մարդկանց նկատմամբ:						
11. Ես վախենում եմ, որ այս աշխատանքն ինձ դաժանացնում է:						
12. Ես զգ ում եմ ինձ էներգ իայով լի:						
13. Ես հուսախաբվում եմ իմ աշխատանքից:						
14. Ես զգ ում եմ, որ շատ եմ չարչարվում իմ աշխատանքում:						
15. Ես զգ ում եմ, որ անտարբեր եմ իմ որոշ հիվանդների ճակատագրի հանդեպ:						
16. Մարդկանց հետ անմիջական աշխատանքը չափազանց մեծ լարվածություն է պահանջում ինձնից:						
17. Ինձ հեշտությամբ հաջողվում է անկաշկանդ փոխհարաբերություններ ստեղծել իմ հիվանդների հետ:						

Ի՞նչ հաճախականությամբ.

	Երբեք	Տարին մի քանի անգ ամ կամ քիչ	Ամիսը մեկ անգ ամ	Ամիսը մի քանի անգ ամ	Շաբաթը մեկ անգ ամ	Շաբաթը մի քանի անգ ամ	Ամեն օր
	1	2	3	4	5	6	7
18. Ես շատ հանրօգ ուտ գ ործեր եմ կատարում այս աշխատանքում:							
19. Հիվանդների հետ անմիջական շփումից ես հոգ եկան վերելք եմ ապրում:							
20. Ես զգ ում եմ, որ համբերությանս բաժակը լցվել է:							
21. Իմ աշխատանքում ես հուզական հարցերին սառնասրտորեն եմ վերաբերվում:							
22. Ես զգ ում եմ, որ հիվանդներն իրենց որոշ պրոբլեմների համար ինձ են մեղադրում:.							

D. Այս բաժնում առաջարկվում են հարցեր Ձեր աշխատանքի մասին՝ որպես բուժքրոջ, և Ձեր բաժանմունքում ու ընդհանրապես հիվանդանոցում ցուցաբերվող բուժօգ նության մասին: Յուրաքանչյուր հարցին պատասխանեք՝ շրջանակի մեջ վերցնելով Ձեր ընտրած պատասխանի համարը կամ, որտեղ անհրաժեշտ է՝ լրացնելով բաց թողնված տողը:

1. Ընդհանուր առմամբ, որքանով եք Դուք բավարարված Ձեր ներկայիս աշխատանքով:
1. Ամենևին բավարարված չեմ
 2. Մի քիչ բավարարված չեմ
 3. Բավականին բավարարված եմ
 4. Լիովին բավարարված եմ

2. Անկախ Ձեր ներկա աշխատանքից, որքանով եք Դուք գ ոհ, որ բուժքույր եք:

1. Շատ դժգ ոհ եմ
2. Մի քիչ դժգ ոհ եմ
3. Բավականին գ ոհ եմ
4. Շատ գ ոհ եմ

3. Ըստ Ձեզ, որքանով է հավանական, որ առաջիկա 12 ամիսների ընթացքում Դուք կկորցնեք Ձեր աշխատանքը:

1. Շատ հավանական է
2. Բավականին հավանական է
3. Այնքան էլ հավանական չէ
4. Բոլորովին հավանական չէ

4. Դուք պլաններ ունե՞ք թողնելու Ձեր ներկայիս բուժքույրական աշխատանքը:

1. Այո, առաջիկա 6 ամսվա ընթացքում
2. Այո, առաջիկա 12 ամսվա ընթացքում
3. Առաջիկա մեկ տարվա համար այդպիսի պլաններ չունեն
4. Ընդհանրապես այդպիսի պլաններ չունեն

5. Եթե այլ աշխատանք փնտրելիս լինեիք, ըստ Ձեզ, որքանով հեշտ կլինեք գ տնել ընդունելի աշխատանք Ձեր մասնագ իտությամբ:

1. Շատ հեշտ
2. Բավականին հեշտ
3. Բավականին դժվար
4. Շատ դժվար

6. Ընդհանուր առմամբ, ինչպե՞ս կգ նահատեիք բուժքույրական աշխատանքի որակը Ձեր բաժանմունքում:

1. Գերազանց
2. Լավ
3. Բավարար
4. Վատ

7. Անցած տարվա ընթացքում որքա՞ն հաճախ է հետևյալը պատահել Ձեր կամ Ձեր հիվանդների հետ.

	Երբեք 1	Հազվադեպ 2	Երբեմն 3	Հաճախ 4
1. Հիվանդը ստացել է սխալ դեղամիջոց կամ դեղաչափ				
2. Ի հայտ է եկել ներհիվանդանոցային կամ վերքային ինֆեկցիա				
3. Բողոքներ են եղել է հիվանդի կամ նրա ընտանիքի կողմից				
4. Հիվանդը ընկել է և վնասվածք ստացել				
5. Աշխատողը ստացել է աշխատանքի հետ կապված վնասվածք				
6. Բուժքույրերին վիրավորել են խոսքով				

8. Ընդհանուր առմամբ, անցած տարվա ընթացքում ինչպե՞ս է փոխվել բուժօգ նության որակը Ձեր հիվանդանոցում:

1. Լավացել է
2. Մնացել է նույնը
3. Վատացել է

9. Որքանո՞վ եք Դուք վստահ, որ հիվանդանոցից դուրս գ րվելուց հետո Ձեր հիվանդները կկարողանան կազմակերպել իրենց խնամքը:

1. Շատ վստահ եմ
2. Վստահ եմ
3. Ինչ-որ չափով վստահ եմ
4. Ամենևին վստահ չեմ

10. Որքանո՞վ եք Դուք վստահ, որ ղեկավարությունը կարձագ անքի հիվանդի խնամքին կամ բուժօգ նությանը վերաբերվող խնդիրներին, որոնք վեր են հանվում Ձեր կողմից:

1. Շատ վստահ եմ
2. Վստահ եմ
3. Ինչ-որ չափով վստահ եմ
4. Ամենևին վստահ չեմ

11. Եթե Ձեր ընտանիքի որևէ անդամ կարիք ունենար բժշկական օգ նության, Դուք կնախընտրեի՞ք, որ նա ստանար այդ օգ նությունը Ձեր հիվանդանոցում:

1. Այո
2. Ոչ

12. Դուք երբևէ վնասվե՞լ եք ասեղով կամ որևէ այլ սուր գ ործիքով, որը գ ործածվել է հիվանդի համար:

1. Այո
2. Ոչ

Եթե վնասվել եք.

- a) Քանի՞ անգ ամ է դա պատահել Ձեր բուժքույրական աշխատանքի ընթացքում (եթե ոչ մի անգ ամ, նշել «0») _____ անգ ամ
- b) Այդ դեպքերից քանի՞սն են պատահել անցած տարվա ընթացքում (եթե ոչ մի անգ ամ, նշել «0») _____ -ը
- c) Այդ դեպքերից քանի՞սն են պատահել անցած ամսվա ընթացքում (եթե ոչ մի անգ ամ, նշել «0») _____ -ը

E. Այս բաժնում հարցեր են առաջարկվում այն մասին, թե ինչ աշխատանքներ եք կատարել Դուք Ձեր վերջին հերթափոխի ընթացքում: Յուրաքանչյուր հարցին պատասխանեք՝ շրջանակի մեջ վերցնելով Ձեր ընտրած պատասխանի համարը կամ, որտեղ անհրաժեշտ է՝ լրացնելով բաց թողնված տողը:

1. Ի՞նչ հերթափոխ է եղել Ձեր վերջին հերթափոխը:

1. Ցերեկային
2. Երեկոյան
3. Գիշերային
4. Շուրջօրյա

2. Քանի՞ հիվանդ կար բաժանմունքում Ձեր վերջին հերթափոխի ժամանակ. _____ հիվանդ.

3. Այդ հիվանդներից քանի՞սն էր գ տնվում Ձեր հսկողության տակ. _____ հիվանդի

4. Այդ հիվանդներից քանիսի՞ վիճակն էր. a) չափազանց ծանր _____

b) բավականին ծանր _____

c) ոչ այնքան ծանր _____

a)-c) տողերում գ թանցված թվերի գ ունարը պետք է հավասար լինի 3-րդ հարցում Ձեր նշած թվին:

6. Նշված աշխատանքներից որո՞նք եք կատարել Ձեր վերջին հերթափոխի ընթացքում (նշեք բոլորը, որ կատարել եք):

1. Սննդի սկուտեղների բաժանում և ետ հավաքում

2. Օժանդակ ծառայությունների (օր.՝ ֆիզիոթերապիա, լաբորատոր քննություններ) պատվիրում, կոորդինացում կամ կատարում

3. Ն/Ե ներարկումներ

4. Դուրս գ բոլմների և տեղափոխումների կազմակերպում

5. Էլեկտրասրտագ թուրքայան կատարում

6. Պարզ ֆլեբոտոմիա

7. Հիվանդների տեղափոխում

8. Տեխնիկական աշխատանք (օր.՝ հիվանդասենյակների մաքրում)

9. Վերը նշվածից ոչ մեկը

7. Նշված աշխատանքներից որո՞նք էին կարևոր, սակայն ժամանակ չլինելու պատճառով չեք հասցրել կատարել Ձեր վերջին հերթափոխի ընթացքում (նշեք բոլորը, որոնք համապատասխանում են).

1. Հիվանդներին և նրանց ընտանիքներին կրթական տեղեկություններ և բացատրություններ տալը

2. Հիվանդներին և նրանց ընտանիքներին նախապատրաստելը հիվանդի դուրս գ ըմանը

3. Հիվանդների հետ զրուցելը և նրանց հանգ ստացնելը

4. Կատարված բուժօգ նությունը ինչպես հարկն է գ թանցելը

5. Պառկած հիվանդների մեջքի մերսումն ու մաշկի խնամքը

6. Հիվանդների բերանի խոռոչի հիգ իենիկ մշակումը

7. Բուժքույրական օգ նության պլանի կազմումն ու նորացումը

8. Վերը նշվածից ոչ մեկը

8. Ինչպե՞ս կգ նահատեիք Ձեր վերջին հերթափոխի ժամանակ ցուցաբերված բուժքույրական օգ նության որակը:

1. Գերազանց
2. Լավ
3. Բավարար
9. Վատ

F. Այս բաժնում առաջարկվում են ընդհանուր հարցեր Ձեր անձի և կրթության մասին: Հարցերին պատասխանեք՝ շրջանակի մեջ վերցնելով Ձեր ընտրած պատասխանի համարը կամ լրացնելով բաց թողնված տողը:

1. Ձեր սեռը. 1. Իգ ական 2. Արական

2. Ձեր տարիքը. _____ տարեկան

3. Ո՞ր երկրում եք ստացել Ձեր հիմնական բուժքույրական կրթությունը.

4. Ունե՞ք անչափահաս երեխաներ, որոնք ապրում են Ձեզ հետ. 1. Այո 2. Ոչ

5. Խորհուրդ կտայի՞ք Ձեր ընկերոջը կամ ազգ ականին՝ նույնպես ընտրել բուժքրոջ մասնագ իտությունը:

1. Ոչ
2. Այո, որոշ վերապահումներով
3. Այո, առանց վերապահումների

Շնորհակալություն, որ ժամանակ տրամադրեցիք հարցաթերթիկը լրացնելու համար:

Медицинский Центр Норк Мараш / Американский Университет Армении



Опрос медсестер

Уважаемая медсестра:

В Медицинском Центре Норк Мараш (МЦНМ) осуществляется программа по Улучшению качества медицинской службы. Для улучшения медсестринской службы нам необходима Ваша помощь в описании этой службы в МЦНМ.

Вы можете отказаться от участия в программе, однако Ваше мнение крайне важно для нас! Будьте искренни, отвечая на вопросы. Ваши ответы останутся конфиденциальными и никоим образом не повлияют на Ваш рабочий статус.

Постарайтесь ответить на все вопросы. Если Вы не знаете точного ответа на данный вопрос, выберите тот вариант ответа, который, по Вашему мнению, наиболее близок к действительности.

Данный опрос проводился в 8 странах и возглавлялся Университетом Пенсильвании, США. В Армении Медсестринский опрос был проведен в Медицинском центре “Эребуни” и больнице “Скорая помощь”, под руководством Американского Университета Армении.

В. Для каждого из приведенных ниже утверждений отметьте, насколько Вы согласны, что данная характеристика присутствует в Вашей **НЫНЕШНЕЙ РАБОТЕ**. Поставьте крестик (“х”) под колонкой, которая наилучшим образом отражает степень Вашего согласия с приведенным утверждением. Если Вы не знаете о чем идет речь в каком-либо из утверждений, отметьте ответ 4: “Категорически несогласна”.

Согласны ли Вы, что в Вашей нынешней работе присутствует следующее:	Полностью согласна 1	Частичн о согласна 2	Частичн о не согласна 3	Категори -чески не согласна 4
1. Удовлетворительная работа санитарно-технической службы больницы позволяет Вам уделять должное время пациентам.				
2. Врачи и медсестры находятся в хороших рабочих отношениях.				
3. Есть возможность работать в отделении, где больным оказывают высокоспециализированную помощь.				
4. Руководящие сотрудники больницы поддерживают медсестер.				
5. Удовлетворительная зарплата.				
6. В больнице регулярно организуются учебные программы для медсестер.				
7. Возможность для медсестер участвовать в принятии решений относительно лечения больных.				
8. Новые и конструктивные предложения медсестер по оказанию помощи больным получают поддержку у руководства.				
9. Наличие времени и возможности для обсуждения с другими медсестрами вопросов, связанных с уходом за больными.				
10. В отделении достаточно медсестер для обеспечения качественного ухода за больными.				
11. Старшая медсестра отделения хороший организатор и лидер.				
12. Главная медсестра больницы уважаема и доступна для персонала.				
13. Врачи признают вклад медсестер в уход за больными.				
14. В учреждении достаточно персонала для осуществления работы.				
15. Свобода в принятии важных решений, связанных с работой и уходом за больными.				
16. Похвала и признание хорошей работы.				

Согласны ли Вы, что в Вашей нынешней работе присутствует следующее:	Полностью согласна 1	Частичн о согласна 2	Частичн о не согласна 3	Категори -чески не согласна 4
17. Руководство ожидает высоких стандартов от медсестринской службы.				
18. Главная медсестра больницы имеет равный престиж и власть по сравнению с остальными руководящими лицами клиники.				
19. Врачи и медсестры работают сообща.				
20. Врачи оказывают качественную медицинскую помощь.				
21. Есть возможность для продвижения.				
22. Врачи с уважением относятся к медсестрам.				
23. Работа с клинически компетентными медсестрами.				
24. Старшая медсестра отделения поддерживает медсестер в принятии решений, даже в случае разногласий с врачом.				
25. Руководство выслушивает и принимает во внимание замечания сотрудников.				
26. В больнице действует специальная программа, направленная на обеспечение качества медобслуживания.				
27. Медсестры вовлечены в дела внутреннего управления больницы (например, участие в различных внутрибольничных комитетах).				
28. Врачи и медсестры находятся в тесном сотрудничестве.				
29. Медсестры имеют возможность быть вовлеченными в внутрибольничные и медсестринские комитеты по организации работы больницы.				
30. Вклад медсестер в уход за больными общепризнан.				
31. Старшие медсестры обсуждают с персоналом ежедневные проблемы и процедуры.				
32. Врачи с должным вниманием относятся к замечаниям и мнениям медсестер.				
33. Для всех пациентов медсестры составляют постоянно обновляемый письменный план сестринского ухода.				

Согласны ли Вы, что в Вашей нынешней работе присутствует следующее:	Полностью согласна 1	Частичн о согласна 2	Частичн о не согласна 3	Категори -чески не согласна 4
34. В уходе за больными применяется принцип приемственности, т.е. уход за конкретным больным осуществляет одна и та же медсестра.				
35. Работа с опытными медсестрами, хорошо знающими внутреннюю систему клиники.				

С. В данном разделе содержатся утверждения относительно Ваших ОЩУЩЕНИЙ, СВЯЗАННЫХ С РАБОТОЙ. Если Вы никогда не испытывали данное ощущение, поставьте крестик "х" под колонкой "Никогда". В противном случае укажите, как часто у Вас были описанные ощущения, отмечая крестиком соответствующую колонку.

Как часто?	Никогда 1	Несколько раз в год или реже 2	Раз в месяц 3	Несколько раз в месяц 4	Раз в неделю 5	Несколько раз в неделю 6	Каждый день 7
1. Чувствую себя эмоционально истощенной от моей работы.							
2. К концу рабочего дня чувствую себя изнуренной.							
3. По утрам чувствую усталость от того, что мне предстоит перенести еще один день работы.							
4. Я с легкостью могу распознать ощущения и мысли моих больных.							

Как часто?	Никогда	Несколько раз в год или реже	Раз в месяц	Несколько раз в месяц	Раз в неделю	Несколько раз в неделю	Каждый день
	1	2	3	4	5	6	7
5. Мне кажется я иногда воспринимаю больных в качестве безличных предметов.							
6. Постоянная работа с людьми - настоящее мучение для меня.							
7. Я с успехом справляюсь с проблемами своих больных.							
8. Я чувствую себя истощенной от работы							
9. Я чувствую, что положительно влияю на жизни людей.							
10. С тех пор как я поступил(а) на эту работу, я стал(а) более безразличен(на) к людям.							
11. Я беспокоюсь что эта работа очерствляет меня.							
12. Я полна энергии.							
13. Я чувствую разочарование в моей работе.							
14. Я работаю чересчур усердно.							
15. Я чувствую, что безразлична к судьбе некоторых моих больных.							
16. Непосредственная работа с людьми очень напрягает меня.							
17. Я с легкостью могу создать атмосферу непринужденности со своими пациентами.							
18. На своей работе я делаю много полезного.							
19. Непосредственная работа с пациентами вдохновляет меня.							
20. Я чувствую, что я на пределе.							
21. Я спокойно справляюсь с эмоциональными							

Как часто?	Никогда	Несколько раз в год или реже	Раз в месяц	Несколько раз в месяц	Раз в неделю	Несколько раз в неделю	Каждый день
	1	2	3	4	5	6	7
проблемами на работе.							
22. Я чувствую, что пациенты обвиняют меня в некоторых своих проблемах.							

D. В данном разделе содержатся вопросы о профессии медсестры и вашем мнении об уходе за больными в отделении и больнице, которой Вы работаете. Возьмите в кружок номер соответствующего ответа, либо заполните пробелы там, где необходимо.

1. В целом, насколько Вы удовлетворены своей нынешней работой?
 5. Крайне неудовлетворена
 6. Несколько неудовлетворена
 7. Умеренно удовлетворена
 8. Очень удовлетворена

2. Независимо от Вашей нынешней работы, насколько Вы удовлетворены тем что являетесь медсестрой?
 1. Крайне неудовлетворена
 2. Несколько неудовлетворена
 3. Умеренно удовлетворена
 4. Очень удовлетворена

3. Как по вашему, насколько вероятно что вы потеряете работу в ближайшие 12 месяцев?
 1. Очень вероятно
 2. Довольно вероятно
 3. Не очень вероятно
 4. Вообще невероятно

4. Планируете ли Вы оставить нынешнее рабочее место?

1. Да, в течение ближайших 6 месяцев
2. Да, в течение ближайших 12 месяцев
3. В течение ближайшего года не планирую
4. Вообще не планирую

5. Если бы Вы искали работу в другом месте, по вашему мнению, как трудно было бы найти приемлемую работу для медсестры?

1. Очень легко
2. Довольно легко
3. Довольно трудно
4. Очень трудно

6. В целом, как бы Вы охарактеризовали качество медсестринского ухода в Вашем отделении?

1. Отличное
2. Хорошее
3. Удовлетворительное
4. Плохое

7. В течение прошлого года как часто, по Вашему мнению, случался каждый из нижеперечисленных инцидентов с Вами или Вашими пациентами?

Никогда Редко Иногда Часто
1 2 3 4

1. Больной получил неправильное лекарство или дозировку
2. Больничная инфекция / инфекция раны
3. Жалобы со стороны пациентов или их семей
4. Падение больного с последующей травмой
5. Производственная травма медперсонала

Никогда
1

Редко
2

Иногда
3

Часто
4

6. Случай словесного оскорбления медсестры

8. В целом, качество больничного ухода в Вашей клинике в течение последнего года:

1. Улучшилось
2. Осталось на том же уровне
3. Ухудшилось

9. Насколько вы уверены, что Ваши пациенты в состоянии организовать собственный уход после выписки из больницы?

1. Очень уверена
2. Уверена
3. До некоторой степени уверена
4. Вообще не уверена

10. Насколько вы уверены, что администрация примет меры для разрешения доложенной Вами проблемы, связанной с уходом за больными?

1. Очень уверена
2. Уверена
3. До некоторой степени уверена
4. Вообще не уверена

11. Если кому-либо из Вашей семьи потребуется медицинская помощь, посоветуете ли Вы обратиться в Вашу больницу?

3. Да
4. Нет

12. Было ли так, чтобы Вы укололись иглой или другим острым инструментом использованными для больных?

10. Да
11. Нет

Если укололись:

- a) Как часто это случалось в вашей медсестринской практике? (напишите "0" если ни разу не случилось) _____ раз
- b) Из них сколько случаев было за последний год? (напишите "0" если ни разу не было) _____ случаев
- c) Из них сколько случаев было за последний месяц? (напишите "0" если ни разу не было) _____ случаев

Е. В данном разделе содержатся вопросы о Вашей деятельности в течение ПОСЛЕДНЕЙ ПОЛНОЙ СМЕНЫ. Возьмите в кружок номер соответствующего ответа, либо заполните пробелы там, где необходимо.

1. В какую смену Вы работали в прошлый раз?
1. Дневную
 2. Вечернюю
 3. Ночную
 4. Суточную
2. Сколько пациентов было в отделении во время Вашей последней смены? _____ пациентов.
3. Сколько пациентов находилось непосредственно под Вашим наблюдением? _____ пациентов.
4. Сколько из этих пациентов находилось:
- a) в очень тяжелом состоянии _____
 - b) в довольно тяжелом состоянии _____
 - c) в не очень тяжелом состоянии _____

Сумма чисел пунктов а)-с) должна соответствовать ответу в вопросе ¹

6. Которые из нижеперечисленных обязанностей Вы выполняли во время Вашей последней смены? (возьмите в кружок все соответствующие ответы)

1. Подача пищи больным и сбор посуды
2. Назначение, координация или осуществление вспомогательных услуг/процедур (н-р, лечебная физкультура, назначение лабораторного исследования)
3. Выполнение внутривенного вливания
5. Организация перевода/транспортировки больного в другое лечебное заведение
6. Выполнение ЭКГ
7. Обычная флеботомия
8. Транспортировка больных
9. Работа по хозяйству (н-р, уборка больничных палат)
10. Ни одно из вышеперечисленного

7. Которые из нижеперечисленных заданий Вы должны были выполнить, однако по причине нехватки времени не осуществили? (возьмите в кружок все соответствующие ответы)

1. Повседневная просветительская/пояснительная работа с больными и их семьями
2. Подготовка больных и их семей к выписке
3. Утешительная беседа с больными
4. Надлежащее протоколирование медсестринского ухода
5. Массаж спины/уход за кожей постельных больных
6. Гигиена ротовой полости больных
7. Разработка или коррекция плана по уходу за больными
8. Ни одно из вышеперечисленного

8. Как бы Вы охарактеризовали качество медсестринского ухода во время Вашей последней смены?

1. Отличное
2. Хорошее
5. Удовлетворительное
6. Плохое

F. В данном разделе содержатся общие вопросы по Вашим биографическим данным. Возьмите в кружок номер соответствующего ответа, либо заполните пробелы там, где необходимо.

1. Ваш пол? 1. Женский 2. Мужской
2. Ваш возраст? _____ лет
3. В какой стране Вы получили основное медсестринское образование? _____
4. Имеете ли Вы несовершеннолетних детей, которые живут с Вами? 1. Да 2. Нет
5. Посоветуете ли Вы карьеру медсестры вашему другу или члену семьи?
 4. Нет
 5. Да, с небольшой оговоркой
 6. Да, без оговорок

СПАСИБО ЗА УЧАСТИЕ В ИССЛЕДОВАНИИ !

Guidelines on Data Analysis

1. **Nursing Work Index (NWI)*** – sum of all 35 (b1-b35) items (reversed) of the questionnaire
2. **Autonomy*** – sum of the items b4, b15, and b24 (reversed) of the questionnaire
3. **Control over own work**– sum of the following 7 reversed items: b1, b9, b10, b11, b14, b3, and b34 of the current questionnaire
4. **Relationship with doctors** – sum of the items b2 and b19 (reversed) of the questionnaire
5. **Staffing** - sum of the items b9 and b14 (reversed) of the questionnaire
6. **Administrative support** - sum of the following 5 reversed items: b4, b8, b11, b24, and b25 of the current questionnaire
7. **Career Support*** - sum of the following 4 reversed items: b6, b16, b21, and b30 of the questionnaire
8. **Nurse Competence** - sum of the items b23 and b35 (reversed) of the questionnaire
9. **Doctors’ Value of Nursing** - sum of the items b13, b22 and b32 (reversed) of the questionnaire
10. **Total Burnout** – sum of all 22 items (c4, c7, c9, c12, c17, c18, c19, and c21 reversibly recoded) of the questionnaire
11. **Emotional Exhaustion** – sum of items c1, c2, c3, c6, c8, c13, c14, c16, and c20.
12. **Job Dissatisfaction** – created based on job satisfaction variable, Q.D.1. Job dissatisfaction was coded as 1 if job satisfaction had the values of 1 (very dissatisfied) and 2 (little dissatisfied), whereas Job dissatisfaction was coded as 0, if job satisfaction had 3 (moderately satisfied) and 4 (very satisfied) values.
13. **Plan to Leave** was based on leave variable, Q.D.4. Plans to leave new variable was recoded into 1 if Q.D.4 had values 1 (yes, within the next 6 months) and 2 (yes, within the next 12 months), whereas it was recoded into 0 if Q.D.4 had values 3 (no plans within the next year) and 4 (no plans at all).
14. **Quality of Care Excellent** – based on Q.D.6 where old values 2 (good), 3 (fair), and 4 (poor) were recoded into 0, whereas old value of 1 was recoded into 1.
15. **Care Improvement** – based on Q.D.8 that was recoded into 1 if response corresponded to 1, otherwise (2- remained the same and 3-deteriorated) it was recoded into 0.
16. **Patient Management** – based on Q.D.9. Old values of 1 (very confident) and 2 (confident) were recoded into 1, whereas values of 3 (somewhat confident) and 4 (not at all confident) were recoded as 0.

** These indicators are incomparable with those from the previous studies because of containing fewer constituents.*

APPENDIX 4.

Section B. Items that are present in nurses' current job and their degree of agreement with each statement (n=45)*

Item	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	No response
B1. Adequate support services allow me to spend time with my patients	44.4	31.1	11.1	4.4	8.9
B2. Physicians and nurses have good working relationships	57.8	24.4	11.1	0	6.7
B3. Opportunity to work on a highly specialized patient care unit	86.7	4.4	2.2	0	6.7
B4. A supervisory staff that is supportive of nurses	48.9	33.3	11.1	2.2	4.4
B5. A satisfactory salary	17.8	31.1	24.4	24.4	2.2
B6. Active continuing education programs for nurses	51.1	37.8	6.7	0	4.4
B7. Opportunity for nurses to participate in policy decisions	24.4	35.6	20.0	17.8	2.2
B8. Support for new and innovative ideas about patient care	24.4	35.6	24.4	13.3	2.2
B9. Enough time and opportunity to discuss patient care problems with other nurses	33.3	46.7	11.1	8.9	0
B10. Enough nurses on staff to provide quality patient care	40.0	22.2	17.8	17.8	2.2
B11. A nurse manager who is good manager and leader	62.2	20.0	13.3	0	4.4
B12. A chief nursing officer who is highly visible and accessible to the staff	73.3	11.1	6.7	2.2	6.7
B13. Physicians recognize nurses' contributions to patient care	42.2	35.6	20.0	2.2	0
B14. Enough staff to get work done	35.6	35.6	13.3	13.3	2.2
B15. Freedom to make important patient care and work decisions	33.3	35.6	22.2	4.4	4.4
B16. Praise and recognition for a job well done	37.8	26.7	20.0	11.1	4.4
B17. High standards of nursing care are expected by administration	62.2	22.2	6.7	2.2	6.7
B18. A chief nursing officer is equal in power and authority to other top level hospital executives	66.7	8.9	20.0	2.2	2.2

Item	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	No response
B19. A lot of team work between nurses and physicians	53.3	24.4	17.8	4.4	0
B20. Physicians give high quality medical care	82.2	11.1	6.7	0	0
B21. Opportunities for advancement	71.1	20.0	6.7	2.2	0
B22. Physicians respect nurses	57.8	24.4	11.1	4.4	2.2
B23. Working with nurses who are clinically competent	57.8	28.9	4.4	4.4	4.4
B24. A nurse manager who backs up the nursing staff in decision making, even if the conflict is with a physician	55.6	26.7	13.3	0	4.4
B25. Administration that listens and responds to employee concerns	33.3	22.2	33.3	11.1	0
B26. An active quality assurance program	42.2	24.4	17.8	8.9	6.7
B27. Staff nurses are involved in the internal governance of the hospital (practice and policy committees)	11.1	31.1	22.2	28.9	6.7
B28. Collaboration between nurses and physicians	28.9	51.1	13.3	6.7	0
B29. Staff nurses have the opportunity to serve on hospital and nursing committees	24.4	37.8	22.2	13.3	2.2
B30. The contributions that nurses make to patient care are publicly acknowledged	26.7	37.8	22.2	13.3	0
B31. Nurse managers consult with staff on daily problems and procedures	46.7	15.6	22.2	8.9	6.7
B32. Physicians value nursing observations and judgments	37.8	42.2	11.1	8.9	0
B33. Written, up-to-date nursing care plans for all patients	37.8	22.2	20.0	17.8	2.2
B34. Patient care assignment that foster continuity of care, i.e. the same nurse cares for patient from one day to the next	44.4	11.1	17.8	24.4	2.2
B35. Working with experience nurses who “know” the hospital system	68.9	22.2	4.4	4.4	0

** The responses are presented in percentages*

APPENDIX 5.

Section C. Items reflecting nurses' job related feelings (n=45)*

Item	Never	Few times a year or less	Once a month	Few times a month	Once a week	Few times a week	Every day	No response
1. I feel emotionally drained from my work	33.3	26.7	8.9	13.3	8.9	2.2	4.4	2.2
2. I feel used up at the end of the workday	15.6	4.4	11.1	13.3	4.4	11.1	37.8	2.2
3. I feel fatigued when I get up in the morning and have to face another day on the job.	42.2	15.6	2.2	11.1	8.9	0	17.8	2.2
4. I can easily understand how my patients feel about things.	13.3	6.7	0	0	2.2	13.3	53.3	11.1
5. I feel I treat some patients as if they were impersonal objects.	73.3	11.1	4.4	2.2	0	0	0	8.9
6. Working with people all day is really a strain for me.	71.1	4.4	2.2	2.2	0	6.7	8.9	4.4
7. I deal very effectively with the problems of my patients.	22.2	2.2	0	8.9	0	0	55.6	11.1
8. I feel burned-out from my work.	31.1	24.4	8.9	8.9	4.4	6.7	8.9	6.7
9. I feel I'm positively influencing other people's lives.	15.6	2.2	4.4	4.4	2.2	4.4	57.8	8.9
10. I've become more callous toward people since I took this job.	77.8	8.9	4.4	2.2	2.2	2.2	2.2	0
11. I worry that this job is hardening me emotionally.	75.6	13.3	2.2	2.2	0	0	4.4	2.2
12. I feel very energetic.	17.8	4.4	0	2.2	4.4	13.3	51.1	6.7
13. I feel frustrated by my job.	57.8	17.8	6.7	6.7	0	0	4.4	6.7

Item	Never	Few times a year or less	Once a month	Few times a month	Once a week	Few times a week	Every day	No response
14. I feel I'm working too hard on my job.	20.0	11.1	0	6.7	8.9	6.7	37.8	8.9
15. I don't really care what happens to some patients.	77.8	8.9	0	11.1	0	0	0	11.1
16. Working directly with people puts too much stress on me.	37.8	11.1	4.4	2.2	0	2.2	26.7	15.6
17. I can easily create a relaxed atmosphere with my patients.	17.8	0	0	0	0	13.3	66.7	2.2
18. I accomplish many worthwhile things in this job.	13.3	2.2	0	0	2.2	15.6	60.0	6.7
19. I feel exhilarated after working closely with my patients.	17.8	4.4	8.9	4.4	4.4	6.7	44.4	8.9
20. I feel like I'm at the end of my rope.	37.8	31.1	4.4	13.3	0	8.9	0	4.4
21. In my work, I deal with emotional problems very calmly.	48.9	4.4	4.4	2.2	4.4	4.4	26.7	4.4
22. I feel patients blame me for some of their problems.	64.4	13.3	2.2	2.2	2.2	6.7	6.7	2.2