KEY PREDICTORS OF ATTRACTING AND RETAINING NURSES IN WORKPLACE

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ABSTRACT

Nowadays, nurses are valued and treated as a scarce commodity. Retention of professional nurses is a key to any organization's success. The ability of an organization to retain nurses primarily depends on the creation of a positive work environment. **The aim** of the study was to identify the factors affecting nurses' attraction and retention in selected hospitals in Egypt. A descriptive exploratory **Design** was utilized. **Sample**: five hospitals accepted to participate in the study. A convenient sample of the chief nursing executives and vice chief nursing executives (17 nurses); and a cross-sectional sample (supervisors, head nurses, charge nurses, and staff nurses) of the working nurses (598 nurses) from these hospitals with response rate of 70.2%. **Tool**: a self-administered structured questionnaire (91 items) was developed by the investigators after extensive review of the related literature. **The results**: the overall perception of the study nurses of the factors affecting nurses' attraction and retention was 86.6%. While the highest mean per cent was found in the interdisciplinary relationships followed by the nursing image in the hospital, the lowest mean per cent was found in supportive organizational structure. The mean percent of the remaining eight dimensions could be ranked in descending order, as perceived by the study nurses. Supportive personnel policies, nursing director characteristics, nurses' autonomy, quality of patient care, supportive administration, shared organizational values, supportive front-line managers, and professional development of nurses. **Conclusion**: collaborative interdisciplinary relationships, positive nursing image in the hospital, supportive personnel policies, attributes of the chief nursing officer, nurses' autonomy, quality of patient care, supportive administration, shared organizational values, supportive front-line managers, and professional developmentprograms are essential strategies for enhancing nurses' attraction and retention in workplace.**Recommendations**:Promoting a healthy work environment that support nurses' quality of work and quality of life through staff development programs, supportive nurse managers, competitive salaries and benefits, flexible work schedules, collaborative nurse-physician relationship and ensuring safety culture.

KEYWORDS: Attraction, Autonomy, Healthy Work Environment,Interdisciplinary Relationships, Retention

INTRODUCTION

Nursing shortage is a worldwide phenomenon which has been acknowledged by the Multidisciplinary Global Advisory Group of the World Health Organization. Understanding nursing shortage on a global scale is a complex matter. Measuring the nurse shortage or establishment of the right ratio of nurses to population may vary among countries and make statistical comparisons harder. Buchan and Aiken mentioned that nursing shortage "is not just about number, but about how the health system functions to enable nurses to use their skills effectively" (Booth, 2002; Buchan & Aiken, 2008).

Nursing shortage has resulted in patient safety concerns and affected the hospital staff's ability to detect complications in patients, potentially leading to increased patient death rates. Research studies have illustrated that hospitals with higher nurse to patient ratios have better outcomes in terms of quality of care, patient safety, mortality, etc. (Aiken et al., 2002; Stanton, 2004; Aiken et al., 2010; Needleman et al., 2006; Stone et al., 2007; Paul & MacDonald, 2014).

The Joint commission, (2004) agrees with the relationship between nursing staff and patient outcomes, noting that "inadequate orientation and training is a factor in 58% of serious medication errors. Staffing levels impacted 24% of 1,609 sentinel events over the past five years". Given these facts, effective recruitment and retention of competent staff are critical issues. With the increasing shortage of nursing staff, attraction, recruitment, retention, and related staffing activities have become critical functions within health care organizations.

Organizations that ignore staff retention soon experience problems with quality of care and costs. Staff retention keeps the organization going and meeting its mission and goals. Staff is needed to meet these goals. When staff does not mesh with the culture, problems occursuch as staff frustration, unsatisfactory job performance, and decreased quality of care. These all affect staff negatively and can lead to loss of staff (Finkelman, 2012).

Problems with retention are extremely costly for health care organizations. Every organization has to make a great effort to create an environment that helps to retain staff, particularly nursing staff. "The purpose of recruitment is to hire the staff necessary for your agency to provide quality care. Retention is the tool that will allow your recruitment program to meet these goals. If you cannot retain your staff, you will never be able to recruit sufficient staff" (Hutchison, 2001).

A lot of highly equipped hospitals across Egypt as in Cairo, Tanta, and Alexandria universities in addition to private hospitals couldn't start working due to lack of nurses. This has gained the attention of the government, mass media, newspapers, magazines and also the policy makers and researchers to help in solving this vital issue.

To the best of our knowledge, there has been a few studies that have investigated the factors significantly associated with nurses' retention. Scanty researches studied the attraction and retention strategies. It is hoped that the study results will settle a basis for exploring factors that are associated with nurses' attraction & retention, and developing strategies for attracting and retaining nurses in the Egyptian hospitals especially during this difficult time of nursing shortage.

METHODS AND SUBJECTS

Aim of the Study

The study aimed at investigating the factors affecting nurses' attraction and retention in selected hospitals in Egypt.

RESEARCH QUESTIONS

To fulfill the aim of the study the following question was formulated:

What are the factors associated with nurses' attraction and retention in the Egyptian hospitals?

Research Design

A descriptive exploratory design was utilized to identify the factors affecting nurses' attraction and retention.

Setting

Five hospitals were recruited according to the following criteria: large hospital recruiting large number of nurses and representing the different health care sectors as Governmental & Private, Accredited & Non-accredited, Health Insurance & Ministry of Health, and Academic hospitals.

Hospital (1) was anacademic hospital attached to the Faculty of Medicine- Cairo University; hospital (2) was a private teaching hospital affiliated to Cairo University; hospital (3); was a private sector tertiary care hospital that had been accredited by Joint Commission International (JCI) In September 2015; hospital (4) was a health insurance sector tertiary care hospital; and hospital (5) was one of the ministry of health hospitals.

sample

Study sample was composed of two groups: the first was a convenient sample of the chief nursing executives and vice chief nursing executives of the selected hospitals; and the second was a cross-sectional sample (supervisors, head nurses, charge nurses, and staff nurses) of the working nurses from each selected hospital. Those nurses were recruited randomly.

Sample sizes in each selected hospital was calculated using Yamen, (1967) simplified formula. A 95% confidence level and P= 0.05 are assumed for equation; $n = \frac{N}{1+N\,(e)^2}$ where n is the sample size, N is the population size, and e is the level of precision.

Tools

A self-administered structured questionnaire (Factors Affecting Nurses' Attraction and Retention in Hospitals Questionnaire) was developed by the investigator to collect data for the present study based on extensive review of related literature; the golden standards of the Magnet Recognition Program of the American Nurses Credentialing Center, 2009; and The Practice Environment Scale of the Nursing Work Index (Lake, 2002).

The questionnaire was consisted of two parts; the 1st part was the demographic data of the participants including level of nursing education, years of experience, position, primary work area in the hospital, and employment status (full time or part time). The 2nd part was a five-point scale (1, strongly disagree; 2, disagree; 3, undecided or neutral; 4, agree; and 5, strongly agree)asking the nurses to rate the degreeto which they agreethat each item couldaffect nurses' attraction & retention. This part was consisted of 11 dimensions (92 items); supportive nursing administration, supportive front-line managers, chief nursing executive attributes, supportive organizational structure, supportive personnel policies, quality of patient care, positive nursing image in the hospital, nurses'autonomy, positive interdisciplinary relationships, professional development, and other organizational values. The internal consistency of this scale had been supported andCronbach's Alpha had been 0.955.

VALIDITY OF THE TOOL

Content validity (relevancy) was established by seven experts in nursing administration including two professors from the faculty of nursing-Cairo University; prof. Allison P. Squires, Associate Professor - NYU College of Nursing & Healthcare Human Resources Consultant, New York;vice nursing director for training and education at the Academic Cairo University Hospitals, the director of nursing research at 57357 cancer children hospital in Egypt, and two head nurses working at the selected hospitals.

Clarity, wording, length, format, and overall appearance (face validity) were established and assured by this panel in addition to four assistant lecturers and three clinical instructors in the nursing administration department-faculty of nursing.

PILOT STUDY

A pilot study was carried out on 10% of the study sample(90 nurses) working at different departments at the selected hospitals to ensure the applicability of the tool, and estimate the time needed to complete the questionnaire. Based on the pilot study analysis,some modifications were made in the structure of some items for more clarification and avoiding misunderstanding. This sample wasn't included in the study sample.

ETHICAL CONSIDERATIONS

A primary official permission was obtained from the ethics committee, Faculty of Nursing Cairo University, to conduct the study. Also an official permission from the administrative personnel in the selected hospitals was obtained to carry out the study. Participation in the study was voluntary and based on the nurses' agreement to give informed consent; where informed consent was signed by the participants after reading all its details; the ethical issue considerations include explaining the purpose, nature of the study and stating the possibility to withdraw at any time. Confidentiality of the information would not be accessed by any other part without taking permission of the participants. The study posed no risk for the participants.

PROCEDURE: Was Carried out on Four Phases

1st Phase: Preparatory Phase

The questionnaire was developed after extensive review of the related literature. Then the primary official permission to conduct the study was obtained from the ethical committee, faculty of nursing – Cairo University, then official permission from the administrative personnel in the selected hospitals.

2nd Phase: Recruitment Phase

In each selected hospital, the participants were recruited randomly through selecting the odd number from a given list obtained from the responsible nursing administration personnel. There were a list for each nursing level (supervisors, head nurses, charge nurses, and staff nurses) who had at least one year of nursing experience. All the nursing directors and the vice-Nursing directors were invited to participate in the study at convenience.

3rd Phase: Data Collection Phase

The purpose and nature of the study were explained to the participants who agreed to participate in the study, a written consent was obtained, and then the questionnaire was distributed to them to fill it in their working units at the suitable time. Then the questionnaire was collected at the same day after confirming that all responses were recorded.

4th Phase: Evaluation Phase

The factors associated with nurses' attraction and retention were decided or extracted after the data analysis processes.

The time spent to fill the questionnaire ranged between 20 to 30 minutes. Data were collected in a fifteen months period from Feb. 2016 till Apr. 2017.

STATISTICAL DESIGN

Data were coded and entered into the Statistical Package for the Social Science (SPSS V.22). Then data were analyzed using descriptive statistics in the form of frequency distribution, percentages, mean, and standard deviation. Cronbach's Alpha was used to determine internal reliability (0.955). The significance level (P-value) of all statistical analysis was at less than 0.05.

RESULTS

Table 1: Participated Hospitals, Sample Size, and Response Rate

Study Hospitals	N (Total No. of Nurses)	n (Sample Size)	Response Rate n	%
Hospital 1	300	172	140	**81.40%**
Hospital 2	600	240	158	**65.83%**
Hospital 3	400	201	132	**65.67%**
Hospital 4	130	98	70	**71.43%**
Hospital 5	300	172	115	**66.86%**
Total	**1730**	**883**	**615**	**70.2%**

Table (1) shows that the participated hospitals were five and the total number of respondents was 615 nurses with response rate of 70.2%.

Table 2: Frequency Distribution of Nurses' Educational Background, job title,
Years of Experience, work area in the Hospital, and Employment Status (N= 615)

Demographic Data	(No)	(%)	Demographic Data	(No)	(%)
Educational Background			**Work Area in the Hospital**		
Secondary Nursing School Diploma	161	26.2	In-patient Unit	103	16.7
Technical Nursing Institute	141	22.9	Out-patient clinics	15	2.4
Bachelor degree	253	41.1	Emergency Unit	39	6.3
High Diploma	35	5.7	Intensive care Unit	257	41.8
Master degree	22	3.5	Operating Units	68	11.1
Doctorate degree	3	0.5	In-Service Education & Training	27	4.4
Job title in the hospital			Infection Control	3	0.5
Staff nurse	330	53.6	Nursing Administration	45	7.3
Charge nurse	118	19.3	Dialysis Units	8	1.3
Head nurse	45	7.3	Others	50	8.1
Supervisor	103	16.7	**Employment status**		

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Director	5	0.8	Part time	128	20.8
Others	14	2.3	Full time	487	79.2
Years of experience					
1- < 5	196	31.9			
5- < 10	176	28.6			
10- < 15	90	14.6			
15 and more	153	24.9			

Table (2) reveals the demographic characteristics of the participants. As regards the educational background, forty one per cent of the participating nurses were bachelor nurses, 26.2% were diploma nurses, and 22.9 % were associate degree graduate nurses. More than half of the participating nurses (53.6%) were working as a staff nurses. Sixty per cent of the respondents had 1-<10 years of nursing experience. 41.8% of the participating nurses were working in intensive care units (ICUs), and 16.7% were In-patient units. Most of the participating nurses 79.2% were employed as full time nurses.

Table 3: Mean & Mean Per Cent of the Eleven Dimensions that Affect Attraction and Retention of Nurses in Workplace(N= 615)

No.	Dimensions	No. of Items	Mean	SD	Mean per-cent	SD
1	Supportive administration	16	68.6	10.2	85.8	12.8
2	Supportive front-line managers	15	63.3	7.4	84.4	9.8
3	Chief nursing officer attributes	11	47.6	5.8	86.5	10.6
4	Supportive Organizational structure	3	10.9	2.4	72.5	15.8
5	Supportive personnel policies	5	21.8	3.4	87.4	13.6
6	Quality of patient care	10	43.1	5.3	86.2	10.5
7	Nurses' autonomy	3	13.0	2.9	86.5	19.3
8	Professional development	18	73.3	8.2	81.4	9.1
9	Positive nursing image	3	13.3	2.0	88.6	13.4
10	Positive interdisciplinary relationships	2	9.0	1.1	90.4	11.2
11	Organizational values	6	25.6	2.8	85.4	9.3
	Total	**92**	**389.5**	**40.2**	**86.6**	**8.9**

Table (3) indicates that the overall perception of the study nurses of the factors affecting nurses' attraction and retention was 86.6%. While the highest mean per cent was found in the interdisciplinary relationships (90.4 ± 11.2) followed by the nursing image in the hospital (88.6 ± 13.4), the lowest mean per cent was found in supportive organizational structure (72.5 ± 15.8).The mean per cent of the remaining eight dimensions could be ranked in descending order, as perceived by the study nurses. Supportive personnel policies, Chief nursing officer (CNO) attributes, nurses' autonomy, quality of patient care, supportive administration, organizational values, supportive front-line managers, and professional development of nurses in the following per cents respectively (87.4%, 86.5%, 86.5%, 86.2%, 85.8%, 85.4%, 84.4%, and 81.4%).

DISCUSSIONS

Findings of the current study revealed that the majority (49.1%) of the participants were technical nurses while 41.1% were bachelor nurses. Nurses having higher education such as high diploma, master, and doctorate degree in nursing constituted few per cents but recognizable numbers: high diploma (35 nurses); master (22 nurses); and doctorate (3 nurses).

More than half (53.6%) of the study nurses were staff nurses and most of them (41.8%) were working in intensive care units; this is because the staff nurses are the direct care providers and representing the majority of the nursing manpower. Increased workload in the ICUs is managed with more nurses than the other departments as the nurse/ patient ratios in ICUs are less than (more nurses for the number of patients) the ratios in in-patients' units, out-patient clinics or other departments except the operating units where the ratio is 1:1.

Regarding the participants' years of experience all age categories were represented in approximated percentagesthat enrich the findings of the study as the perception of the factors that may affect nurses' attraction and retention may differ from age category to the other. The majority (79.2%) of the study nurses were employed as full-time nurses (table 1).

Creatinga positive and healthy work environment has become a necessary issue throughout the healthcare. Organizations continue to struggle with attracting and retaining highly qualified nurses, and today are concerned with finding employees who experience a high level of engagement with their work. Unless the workplace environment is positive and affirming, new practitioners may leave all too quickly (Manion, 2009).

A key aspect of a healthy work environment is the relationships one has with colleagues and co-workers. Groups and teams with healthy interpersonal relationships help foster a strong sense of connection and community among people (Manion, 2004; Manion& Bartholomew, 2003; Manion, 2009)

Study findings revealed that the overall perception of the study nurses of the factors affecting nurses' attraction and retention was 86.6%. This means that the study nurses perceived most of the questionnaire items as important factors for enhancing attraction and retention of nurses in workplace. These factors were classified into eleven dimensions which weresupportive nursing administration, supportive front-line managers, chief nursing executive characteristics, supportive organizational structure, supportive personnel policies, quality of patient care, positive nursing image in the hospital, nurses' autonomy, positive interdisciplinary relationships, professional development, and other organizational values.

Positive interdisciplinary relationshipswas perceived as the strongest (90.4%) indicator for improving attraction and retention of nurses. This means that collaboration and good working relationships among physicians, nurses and others has a very important role in the attraction and retention of nurses in workplaces. Nurses and physicians need to respect one another and recognize the expertize of each other. In a study of 3,675 nursing staff from five hospitals, Kalisch and colleagues (2010) found that higher levels of team-work and adequate staffing lead to greater job satisfaction.

This finding goes with El-Bialy &AbdElaal (2013) who found that positive nurse/ physician relationships dimension received the highest percentage as one of the essentials of magnetism. Also this result is consistent with Upenieks (2003) who reported that there is a positive working relationships between nurses and physicians in magnet hospitals. Moreover, high quality patient care outcomes demand that physicians, nurses, and other professionals practice collegially and collaboratively (Upenieks, 2003).

While the lowest mean per cent (72.5%) was found in "supportive organizational structure" dimension. This may be due to lack of awareness of some of the study nurse about the meaning and importance of the organizational structure. This dimension was composed of three factors that were: an organizational structure that is dynamic and responsive to change; Support the influence of the nursing director over nursing practices; and Support the decentralized decision-making.

"Positive interdisciplinary relationships" dimension was followed by "positive nursing image in the hospital" with mean per cent of 88.6%. So, health care organizations should work on improving the image of nursing inside hospitals and also in the community. The nursing should enjoy high status with other departments, physicians should value the opinions of nurses and respect them as professionals. Nursing image also affects recruitment and interest of young people in the profession. Some communities have nurses and nursing students go to high schools to talk about nursing. Recruitment fairs have also become very common (Finkelman, 2012).

The majority of the study nurses perceived that competitive salaries and benefits, flexible schedules and working hours, availability of individual and family health insurance, and availability of annual retention incentives could improve the attraction and retention of nurses in workplaces. These factors represent the "supportive personnel policies"' dimension with mean per cent of 87.4%. This findingwas supported with Palumbo and colleagues, (2009). Moreover, Seago, Spetz, Ash, Herrera, & Keane, (2011) stated that higher pay and better benefits are elements contributing to retention of experienced nurses. Also this is consistent with the forces of magnetism (ANCC, 2009).

Study findings revealed that nurses' autonomy was perceived as a strong predictor of nurses' attraction and retention with mean per cent of 86.5%. This means that the majority of study nurses perceived that having control over nursing practice, having the responsibility and authority to provide direct nursing care, and being involved in decision making that affect nursing practices could affect attraction and retention of nurses in workplace. This is congruent with the forces of magnetism (ANCC, 2009).

In this respect, Apker et al., (2003) reported that professional autonomy was identified as the strongest predictor of nurses' identification with the organization. On contrast, Kramer and Schmalenberg, (2009) reported that almost 60% of the magnet hospital's staff nurses stated that little or no control over nursing practice had existed.

Chief nursing officer' attributes had the fifth rankwith mean per cent of 86.5% which included eleven attributes that the CNO should have. These attributes were: educationally qualified (master or doctorate); oriented with issues of the larger nursing world; having a great deal of contact with both hospital administrators and board members; regularly attend board meetings; report directly to the Chief Executive Officer (CEO) or director; participate in hospital's budget planning; ask for best nursing practice evidences; support interdisciplinary teamwork; and being known to the nursing staff through regular rounds on patient units, formal staff meetings, and celebrations. This may be attributed to that these characteristics of the CNO represent the primary or native image of nurses in the hospital.

The 6th ranked dimension was "quality of patient care" with mean per cent of 86.2%. This means that the hospital's adoption of high standards of nursing care has a great effect on nurses' attraction and retention. This finding was supported by the forces of magnetism (ANCC, 2009).

Nurses' attraction and retention is an important priority to the nursing administration department and also to the human resources department in the hospital. Findings revealed that supportive nursing administration had the 7th rank with mean per cent of 85.8% which had sixteen factors. These factors for example: each level of nurses should has a sense of advocacy from superiors; availability of adequate supplies and equipment; availability of hospital aids for non-nursing duties; administration listens and responds to employee concerns; availability of appropriate places for changing clothes; availability of appropriate Places for taking break times; provision of meals for nurses working more than 8hrs/ day; and availability of good transportation; and availability of nursery for children.

Most of these factors weren't mentioned in the literature, but suggested by the panel of expertise (Jury members) and the pilot study nurses. These factors are very important for nurses' satisfaction that is highly associated with nurses' retention (Ellenbecker, 2004). Nursing administration must establish a culture of caring safety/security for nurses and other health care providers. People want to go to work every day with a sense of pride and respect for their contributions.

On the same line,Vahey et al., (2004); A survey of 820 nurses and 621 patients in 20 hospitals across the United States showed that units characterized by nurses as having adequate staff, good administrative support for nursing care, and good relations between physicians and nurses were twice as likely as other units to report high satisfaction with nursing care.

Study findings revealed that the organizational valueshad the 8th rank with mean per cent of (85.4%). This means that most of the study nurses perceived that hospital brand and reputation, known and shared hospital values, cleanliness and aesthetics of the work surroundings, cost is important, but the patient comes first, and praise & recognition for a job well done play an important role in attraction and retention of nurses in workplace. This result was consistent with Kramer et al., (2008) who mentioned that culture value concern for patient drive both the quality of nurses' work life and the quality of patient care. In addition, creating these culture values not only enhance nurses' satisfaction with work but also improve the quality of patient care.

Moreover, Hurst, Croker, & Bell, (1994) mentioned that staff recognition programs have also been identified as a means of increasing self-esteem, social gratification, morale, and job satisfaction.

As regards "supportive front-line managers" dimension, the majority of the study nurses reported that the nurse manager should be clinically expert and have a strong base of nursing knowledge, advocate and support the nursing staff and the patients, treat their subordinates with respect and consideration, have the ability and willingness to assist nurses in dealing with clinical and administrative problems, resolve nurse–physician conflicts, create an environment that support active participation, discuss the daily problems with nurses, and encourage open communication. At the same time managers should use mistakes for learning not for criticism and provide constructive feedback.

As identified, nurse managers play a key role in both retention and recruitment of staff. The nurse manager's leadership style plays a major role in establishing a culture of retention (Huber, 2014). Nurses expect to be treated with respect and have a sense of security within the job and work environment. This is consistent with the magnet recognition program of the ANA, the AHA (2002) report.Moreover Duffield and colleagues, (2007) and Weberg, (2010) found that the manager's leadership style was a significant predictor of nurses job satisfaction and retention.

Concerningprofessional development, the majority of study nurses reported that the availability of leadership

development programs, use of preceptors and mentors for the new nurses, offering extended orientation period (1-3 months) for the new nurses, support for formal education through flexible scheduling and leaves of absence, opportunities for professional growth in administrative and clinical tracks, participation of nurses in patients' rounds, and supporting nurses to attend continuing education programs could enhance nurses' attraction and retention.While introducing new nurses into clinical settings suddenly, unavailable career development opportunities, and adoption of experience-based clinical ladders not competencies could worse nurses' attraction and retention. This supported with Palumbo and colleagues, (2009).

In this respect, Cottingham, DiBartolo, Battistoni, & Brown, (2010) ; Burr, Stichler, &Poettler, (2011); Weng, Huang, Tsai, Chang, Lin, & Lee, (2010) stated that mentors can provide the support needed to increase new nurses' clinical success, job satisfaction, and retention. Also Halfer, (2007); Pierson et al., (2010) reported that ongoing staff development programshave been shown to increase retention and enhance staff entry into clinical ladder programs.

On the same line,Heslop, (2001) reported that the typical concerns of new nurses in their first 3 months of employment were related to skills, professional roles, patient care management, criticism from other staff members, knowledge of unit routine, and competing demands of school, family, and work.

CONCLUSIONS

This study concludes that the majority of study nurses perceived that collaborative interdisciplinary relationships, positive nursing image in the hospital, supportive personnel policies, attributes of the chief nursing officer, nurses' autonomy, quality of patient care, supportive administration, shared organizational values, supportive front-line managers, and professional development programs were essential criteria/ indicators for enhancing nurses' attraction and retention in workplace.

Findings of this study can provide evidence to support improved strategies that foster retention and satisfaction of nurses especially in these difficult times of global nursing shortage.As long as nursing shortage exist, every effort must be made to create work environments that attract and retain highly qualified professional nurses to ensure that patients continue to receive the quality of care they deserve and that the profession continues to maintain high standards of nursing practice.

RECOMMENDATIONS

Based on the study results, the following strategies are recommended in order to enhance nurses' attraction and retention through:

- Encouraging the Egyptian healthcare organizations to go through the magnet recognition programs.

- Developing policies that support the collaborative interdisciplinary relationships among nurses, physicians and other healthcare members.

- Increasing nurses' control over the context of nursing practice environments by supporting participative management practices, shared governance systems, decentralized decision making, and the creation of autonomous work units.

- Prolonged orientation, in-service and continuing education programs for both staff nurses and managers.

- Clinical advancement programs such as career ladders that provide a means for recognizing nurses' competencies and expertise.

- Competitive salaries and benefits, flexible work schedules, and retention incentives.

- Developing the role of nursing retention specialist who help in proper recruitment and selection of skilled nurses and helping them adjust to workplace and retain them.

REFERENCES

1. Aiken, L., Clarke, S., Sloane, D., Sochalski, J. & Silber, J. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *J. Am. Med. Assoc. 288*, 1987–1993.

2. Aiken, L., Sloane, D., Lake, E., Sochalski, J. & Weber, A. (2010). Implications of the California nurse staffing mandate for other state. *Health Services Research, 45 (4)*, 904- 921. In: Finkelman (2012).

3. American Health Association (AHA), Commission on Workforce for Hospitals and Health Systems. (2002). In out hands: How hospital leaders can build a thriving workforce. *(AHA product No. 210101).* Chicago: Author. In: Huber (2014).

4. American Nurses Association (ANA). (2002). Fact sheet: Registerd nurses in the U.S. nursing by the numbers. *Silver Spring*, MD: Author. In: Huber (2014).

5. American Nurses Credentialing Center. (2009). Forces of Magnetism. Retrieved on December 30, 2009, from http://www.nursecredentialing.org/Magnet/ProgramOverview/forcesofMagnetism.aspx. In: Finkelman (2012).

6. Apker, J., Zabava Ford, W. & Fox, D. (2003). Predicting nurses' organizational and professional identification: the effect of nursing roles, professional autonomy, and supportive communication. *Nursing Economics, 21(5),* 226- 233. In: Huber (2014).

7. Booth, R. (2002). The nursing shortage: A worldwide problem. Revisit a Latino-*Americana De Enfermagem, 10*: 392–400.

8. Buchan, J. & Aiken, L. (2008). Solving nursing shortages: a common priority. *Journal of Clinical Nursing,* 17. Pp.3262-3268.

9. Burr, S., Stichler, J.F., & Poettler, D. (2011). Establishing a mentoring program. *Nursing for Women's Health, 15(3),* 215–224. In: Weiss & Tappen (2015).

10. Cottingham, S., DiBartolo, M.C., Battistoni, S., & Brown, T. (2010). Partners in nursing: A mentoring initiative to enhance nurse retention. *Nursing Education Perspectives, 32(4),* 250–255. In: Weiss & Tappen (2015).

11. Duffield, C., Roche, M., O'Brien-Pallas, L., Diers, D., Aisbett, C., King, M. et al. (2007). Glueing it together: Nurses, their work environment, and patient safety. Australia: University of Technology Sydney, Cent*er for Health Services Management*. In: Huber (2014).

12. Eileen T. Lake. (2002). "Development of the Practice Environment Scale of the Nursing Work Index." *Research*

in Nursing & Health, May/June; 25(3): 176-188.

13. El-Bialy, G. & Abd Elaal, N. (2013). essentials of magnetism as perceived by staff nurses at Alexandria German Hospital. *Life science journal; 10(4)*: 2889- 2899.

14. Ellenbecker, C. (2004). Nursing Theory and Concept Development or Analysis; A theoretical model of job retention for home health care nurses, 303–310.

15. Finkelman, A. (2012). Leadership and management for nurses: Core competencies for quality care. 2nd edition. United States of America. Publishing as Pearson. Pp. 269- 312.

16. Halfer, D. (2007). A magnetic strategy for new graduate nurses. *Nursing Economics, 25(1),* 6- 11. In: Huber (2014).

17. Hay, A. &Stuenkel, D. (2005). Work environmental factors and retention of nurses*. J. Nurs. Care Qual.; 20(3):*283–8.

18. Heslop, L. (2001). Undergraduate student nurses: Expectations and their self-reported preparedness for the graduate year role. *Journal of Advanced Nursing, 36*, 626–634. In: Weiss & Tappen (2015).

19. Huber, D. (2014).Leadership & Nursing Care Management. fifth edition. Elsever. China. Pp. 339-364.

20. Hurst, K.L., Croker, P.A., & Bell, S.K. (1994). How about a lollipop? A peer recognition program. *Nursing Management, 25(9),* 68–73. In: Weiss & Tappen (2015).

21. Hutchison, P. (2001). Strategies for recruiting and retaining health care professionals. Part 2; the right candidate. *Home Care Provider, 6(4).* Pp. 14- 17.

22. Joint commission. (2004). The Joint Commission Press Kit. Retrieved October 7, 2007, available at: http://www.jointcommission.org/newsroom/press/kits. In: Finkelman, (2012).

23. Kalisch, B.J., Lee, H., & Rochman, M. (2010). Nursing staff teamwork and job satisfaction*. Journal of Nursing Management, 18,* 938–947. In: Weiss & Tappen (2015).

24. Kramer, M. & Schmalenberg, C. (2009). Essentials of a productive nurse work environment. *Nursing research, 57(1)*, 2- 13. In: El-Bialy& Abd Elaal (2013).

25. Kramer, M., Schmalenberg, C., Brewer, B., Burke, R, Meek, D. & Waldo, M. (2008). Clinically competent peers and support for education: strctures and practices that work. *Critical care nurse, 28(4),* 54- 65. In: El-Bialy& Abd Elaal (2013).

26. Manion, J. (2004). Strengthing organizational commitment: Understanding the concept as a basis for creating effective workforce retention strategies. *The health care manager; 23(2):* 167- 176. In: Huber (2014).

27. Manion, J. (2009). the engaged workforce: proven strategies to build a positive healthcare workplace. Chicago: AHA press. In: Huber (2014).

28. Manion, J. & Bartholomew, K. (2003). Community in the workplace: a proven retention strategy. *Journal of Nursing Administration; 34(1):* 46- 53. In: Huber (2014).

29. Needleman, J., Buerhaus, P., Stewart, M., Zelevinsky, K. &Mattke, S., 2006. Nurse staffing in hospitals: is there a business case for quality? *Health Aff., 25*; pp. 204–211.

30. Palumbo, M., McIntosh, B., Rambur, B. & Naud, S. (2009). Retaining an ageing nurse workforce: perceptions of human resources practices. *Nursing Economics; 27(4):*221- 232. In: Huber (2014).

31. Paul, J., & MacDonald, L. (2014). Modeling the benefits of cross-training to address the nursing shortage. *International Journal of Production Economics, 150*, 83–95. doi:10.1016/j.ijpe.2013.11.025.

32. Pierson, M., Liggett, C. & Moore, K. (2010). Twenty years of experience with a clinical ladder: A tool fpr professional growth, evidence-based pratice, recruitment, and retention. *The journal of continuing education in nursing, 41(1),* 33-40. In: Huber (2014).

33. Seago, J., Spetz, J., Ash, M., Herrera, C-N., & Keane, D. (2011). Hospital RN job satisfaction and nurse unions. *Journal of Nursing Administration, 41(3),* 109–114. In: Weiss & Tappen (2015).

34. Stanton, M. (2004). Hospital nurse staffing and quality of care. Agency for Healthcare Research and Quality. *Research Action Journal*, 14, 1–7.

35. Stone, P., Mooney-Kane, C., Larson, E., Pastor, D., Zwanziger, J. & Dick, A. (2007). Nurse working conditions, organizational climate, and intent to leave in ICUs: an instrumental variable approach. *Health Service Research. 42*, 1085–1104.

36. Upenieks, V. (2003). Assessing difference in job satisfaction of nurses in magnet and non-magnet hospital. *journal of nursing administration; 32(11):* 564-576. In: El-Bialy& Abd Elaal (2013).

37. Vahey, D., Aiken, L., Sloane, D., Clarke, S., et al. (2004). Nurse burnout and patient satisfaction. *Medical Care, 42(2),* II-57–II-66. In: Weiss & Tappen (2015).

38. Weberg, D. (2010). Transformational leadership and staff retention: An evidence review with implications for healthcare systems. *Nursing Administration Quarterly, 34(3),* 246- 258. In: Huber (2014).

39. Weiss, S. A. & Tappen, R. M. (2015). Essentials of Nursing Leadership and Management. 6th ed. Philadelphia. United States of America. Pp: 185- 197.

40. Weng, R., Huang, C., Tsai, W., Chang, L., Lin, S., & Lee, M. (2010). Exploring the impact of mentoring functions on job satisfaction and organizational commitment of new staff nurses. *BMC Health Services Research, 10,* 240. In: Weiss & Tappen (2015).

41. Yamane & Taro. (1967). Statistics; An Introductory Analysis, 2nd Ed., New York: Harper and Ro