

Essentials Of Magnetism As Perceived By Staff Nurses At Alexandria German Hospital

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Abstract: Magnet is the highest national or international recognition for excellence in the delivery of nursing services that are provided in a professional practice environment, in order to promote quality, evidence-based practice. Resulting in positive patient outcomes. It attracts and retains nurses through specific structures and processes. **Aim:** to assess the staff nurses' perceptions concerning the essentials of magnetism at Alexandria German Hospital. **Subjects:** All nursing staff who are working at Alexandria German Hospital. **Tools of the study:** One tool was used for the essentials of magnetism (EOM). **Results:** In relation to age and years of experience in nursing a significant difference was found with "support for education, control of and over nursing practice, working with other nurses who are clinically competent and nurse manager support" dimensions. Regarding the type of units a significant difference was found with "positive nurse/ physician relationship, support for education, working with other nurses who are clinically competent, nurse manager support and a culture values concern for patient" dimensions. Finally, for educational qualifications, a significant difference was found with "support for education, perceived adequacy of staffing, working with other nurses who are clinically competent and nurse manger support" dimensions. **Conclusion:** Staff nurses perceived moderate level of magnetism and significant differences were found with different EOM dimensions except for "autonomous nursing practice" dimension. **Recommendations:** Awareness in service training program for staff nurses and different levels of nurse manager as well as all other health care providers about magnet process and essentials of magnetism dimension should be developed. Factors hindering autonomous nursing practice are to be studied.

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1. Introduction

The original magnet research study conducted in 1983 identified 14 characteristics that differentiated organizations best able to recruit and retain nurses during the nursing shortages of the 1970s and 1980s.⁽¹⁾

The American Nurses Credentialing Center (ANCC) (2011) taskforce on nursing practice in hospitals conducted a study to identify work environments in order to promote quality, evidence-based practice, and result in positive patient outcomes.⁽²⁾ Also, "attract and retain" well-qualified nurses through specific structures and process were emphasized.⁽³⁾ Forty-one of 163 institutions possessed qualities that enabled greater capacity to attract and retain nurses, described as "magnet" hospitals. Magnet is the highest national or international recognition for excellence in the delivery of nursing services. Moreover, achieving magnet status sends a message to any community to be committed to provide the possible best care.^(2,4) The characteristics that distinguished these organizations from others are known to this day as the "forces of magnetism".⁽⁵⁾ In 2000 magnet expanded to recognize health care organizations outside the U.S.A.⁽⁶⁾

Ulrich *et al.* (2007) stated that interview with nurses working in magnet hospitals have showed that magnet attributes and characteristics of a professional practice work environment were expressed in eight "essentials of magnetism".⁽⁷⁾

Staff nurses in 14 magnet hospitals in USA identified eight dimensions associated with the original concept of magnetism as essentials to their ability to give quality care. The Essentials of Magnetism (EOM) are a psycho-metrically sound instrument that was generated from nurse's observation and interview with several magnet hospital staff nurses.^(8,9) It is composed of the eight dimensions which are highly inter-correlated and interdependent; all are essentials to a healthy work environment and for producing quality of patients care.^(10,11)

These dimensions namely; **Positive nurses/ physicians relationship** comes from working collegially on an equal footing not only because it will increase retention and lower work stress level for nurses but also patients will benefit.⁽¹²⁾ **Support for education** is consistently emphasized by magnet hospital nurses that their educational support is highly valued for recruitment and retention, quality patient

care and job satisfaction.⁽¹³⁾ **Autonomous nursing practice** implies the freedom to act on what nurses know to make independent clinical decisions that achieve the standard nursing practice for the best interest of the patient.⁽¹⁴⁾ **Control of and over nursing practice** is a viable structure through which nurses have input and engage in decision making about practices as well as issues affecting them.⁽¹⁵⁾ **Perceived adequacy of staffing** indicates the sufficient number of nurses in the unit most of the time to give quality patient care.⁽¹⁶⁾

Working with other nurses who are clinically competent is reflected through the perception of the staff nurses towards specialty certification, educational degree, both formal and informal peer review, and reinforcement as evidence of clinical competency.⁽¹⁷⁾ **Nurse-manager support** includes orienting teaching staff, providing learning opportunities, resources needed for patient care and facilitating staff working together to improve patient care.⁽¹¹⁾

A Culture that values concern for the patients reflects both the quality of nurses' work lives and the quality of patient care. It is the normative glue that preserves and strengthens the group and provides the healing warmth essentials for quality patient care.⁽¹³⁾

Various studies were conducted internationally; Al-Ateeq (2008) explored the relationship between nurses' perceptions of work environment and patient safety culture in a clinical setting. This study revealed that there are significant relationships among the essentials of work environment and patients' safety culture.⁽¹⁰⁾ Moreover, Rosenberg (2008) studied the magnet hospitals and patient outcomes. He concluded that magnet hospitals tended to differ from non-magnet hospitals on several organizational attributes. Patients who had received their care in magnet hospitals were not more or less likely to die during their hospitalization than in non-magnet hospitals.⁽¹⁸⁾

Nationally, El-Sayed (2010) studied the magnetism dimensions for the satisfaction of nursing staff and patients. This study clarified that nursing staff reported their agreement on the presence of all magnetism dimensions which correlated positively with their job satisfaction.⁽¹⁹⁾

Another research was done to study the magnetism dimensions for satisfaction of nursing staff and patients at Mansoura University, it was concluded that, nursing staff who are working in general units reported their agreement on presence of all magnetism dimensions, while nurses in ICU unit reported low agreement and satisfaction with autonomy, organization support, shared governance and educational opportunities. Moreover, patients reported low satisfaction with medical care, comfort and visiting hours.⁽²⁰⁾

To the best of our knowledge, no attempt was carried out to study staff nurses perception about the essentials of magnetism in Egypt. Thus, the present study aims to assess the staff nurses' perceptions about the essentials of magnetisms at Alexandria German Hospital. It is hoped that the findings of this study will enhance nurse's work environment, particularly during this difficult time of nursing shortages, a higher quality of nursing care can be delivered, nurses' job satisfaction may increase which would in turn lead to decreased absenteeism, turnover and improve their productivity as well as the quality of care. In addition, it provides additional information for nurse managers to identify opportunities for the improvement in participating setting and to establish a baseline for assessing future improvement efforts.

Aim of the study

This study aims to assess the staff nurses' perceptions concerning the essentials of magnetism at Alexandria German Hospital.

Research question

What are the staff nurses' perceptions concerning the essentials of magnetism at Alexandria German Hospital?

2. Material and Methods

Material

Design: A descriptive study was utilized.

Setting: This study was conducted in all in-patient care units at Alexandria German Hospital. It is a private hospital that comprises five in-patient care unit namely: (B, C, D, E and high risk), emergency unit, operating room, intensive care units and hemo-dialysis unit.

- The hospital was selected because it is one of the biggest, having the best reputation among other private hospitals at Alexandria governorate. In addition, it entails different medical specialties.

Subjects: The study comprised 87 staff nurses who are working in the previously mentioned units and who were available at the time of data collection with a minimum of one year experience and being interested in participating in the study.

Tool of study: One tool was used in this study:

The Essentials of Magnetism tool (EOM).

Essentials of magnetism was developed by Kramer *et al.* (2004). It is used to assess staff nurses' perceptions of their work environment.⁽¹⁷⁾ It consists of 58 items classified into eight dimensions. These dimensions are: positive nurse/ physician relationships (6 items); support for education (4 items); autonomous nursing practice (9 items); control of and over nursing practice (8 items); perceived adequacy of staffing (6 items); working with other clinically competent nurses

(6 items); nurse manager support (8 items) and a culture that values concern for the patient (11 items).

Responses are measured on a four-point Likert scale ranging from 1 to 4. Seven dimensions use the response option categories in terms of agreement (4=strongly agree to 1= strongly disagree) and one dimension positive nurse/ physician relationships use the response option of frequency (4= true most of the time to 1= not true). Negative reversed statements were reverse coded before the analysis. In addition, demographic data of staff nurses such as; age, educational qualification, and years of experience in nursing were also included.

Scoring system:

The overall level of magnetism perceived by staff nurses was recalculated as a percentage of the maximum score for the 58 items. It was then categorized into three equal categories, namely, low < 33.3%, moderate 33.3%-66.6% and high > 66.6%.

Methods:

1. A written approval was obtained from the authorized personnel of German Hospital to collect the necessary data.
2. The EOM tool was translated by the researchers into Arabic language and submitted to five experts at the Faculty of Nursing, Alexandria University in nursing administration department for content validity. Accordingly, some few statements were modified.
3. A pilot study was carried out on nine staff nurses. They were conveniently selected and were not included in the study subjects. The pilot study was used to ensure the clarity of the questionnaires, identify obstacles, and problems that may be encountered during data collection and to estimate the time needed to fill out the questionnaire. Based on the pilot study, some modifications were done.
4. The reliability of the tool was tested by measuring the internal consistency of items using Cronbach's alpha. It proved to be 0.941.
5. **Ethical consideration:**
 - Written consents were obtained from the study subjects before collecting the data,
 - Subjects, privacy, anonymity and confidentiality were assured.
6. Data collection took four week period starting from 1/10/2011 to 31/10/2011. Furthermore, it was collected from staff nurses by distributing the previously mentioned questionnaires.
7. **Statistical analysis:** The SPSS V 19.0 was used for data analysis data. Frequency tables and cross tabulations were used to illustrate the results of categorical data. Quantitative data were presented as arithmetic means and standard deviations. Comparison of

means was done using the One-Way Analysis of Variance (ANOVA).

3. Results:

Table (1) reveals the demographic characteristics of staff nurses. As regards, types of units the highest percentage of the staff nurses' (42.52%) are working in the in-patient care units, while, the lowest percentage (4.60%) are working in the hemodialysis unit. In relation to staff nurse age the highest percentage (74.71%) are in the age group less than 30 years, while the lowest percentage (11.49%) are in the age group 40 years and more. According to years of experience in nursing, the highest percentage (52.87%) had less than five years, while the lowest percentage (11.50%) had experience in nursing ranging from 10 to less than 15 years.

Concerning staff nurses' educational qualifications, the highest percentage (68.96%) hold Bachelor Degree of Science in Nursing, on the other hand 18.40% hold Diploma of Secondary Nursing School and only 8.04% graduated from Technical Health Institute.

Table (2) shows that 97.7% of the staff nurses perceive the overall level of magnetism as **moderate**. Regarding staff nurses perception of essentials of magnetism dimensions (EOM), the positive nurses/physicians relationships received the highest percentage (92%), while perceived adequacy of staffing received the lowest percentage (80.5%). The remaining six dimensions could be ranked in descending order, as perceived by staff nurses. Support for education (88.5%), as well as a culture values concern for the patient (88.5%), working with other nurses who are clinically competent (87.4%), the nurse manager support (86.2%), autonomous nursing practice (85.1%), control of and over nursing practice (85.1%).

Table (3) portrays that a highly significant difference was detected between staff nurses age and total EOM where $p = 0.003$, as well as a downward trend for mean score according staff nurses' age. Also, highly significant differences were found in "support for education, control of and over nursing practice, working with other nurses who are clinically competent and nurse manager support" dimensions ($p = 0.005, 0.003, 0.004$ and 0.004 respectively). As regards "support for education, control of and over nursing practice, working with other nurses who are clinically competent and nurse manager support" dimensions, the highest mean scores were found in the staff nurses' age group less than 30 years "9.7 ± 1.73, 19.0 ± 2.84, 13.8 ± 2.41 and 17.2 ± 2.99" respectively, while, the lowest mean scores were found in the nurses age group who had 40 years and more "7.9 ±

1.20, 15.6 ± 2.91 , 11.2 ± 2.86 and 13.6 ± 3.50 respectively.

Table (4) illustrates a highly significant difference between type of units and staff nurses perception according to EOM dimensions ($p = 0.002$). Meanwhile, there was no definite trend according to type of units.

Moreover, this table shows that significant differences were found in relation to "Positive nurses/physician relationship, support for education, working with other nurses who are clinically competent, nurse manager support and a culture values concern for patient" dimensions where ($P = 0.00$, 0.016 , 0.002 , 0.00 and 0.001 respectively).

Also, this table shows that staff nurses' highest mean score were found in in-patient Care Units concerning "Positive nurse/physician relationship, nurse manager support and a culture values concern for the patient" dimensions with mean scores " 12.2 ± 2.09 , 17.7 ± 2.69 , and 24.3 ± 4.21 " respectively. However, the staff nurses lowest mean score were found in the Hemodialysis Unit in relation to the same dimensions " 8.5 ± 1.00 , 11.3 ± 3.77 and 17.8 ± 2.06 " respectively.

As regards "support for education and working with other nurses who are clinically competent" dimensions the staff nurses highest mean scores were found in Intensive Care Unit " 10.1 ± 1.65 and 14.1 ± 1.92 " respectively, while, the staff nurses lowest mean scores were found in hemodialysis " 7.5 ± 1.73 and 10.3 ± 1.26 " respectively.

Table (5) describes a significant difference between staff nurses' years of experience in nursing and total EOM dimensions, where $p = 0.029$. Also, a downward trend form mean score according staff nurses years of experience in nursing was found.

Moreover, this table illustrates significant differences in relation to staff nurses years of experience in nursing and support for education, control of and over nursing practice, working with other nurses who are clinically competent and nurse manager support dimensions ($P = 0.012$, 0.041 , 0.034 and 0.034 respectively).

Concerning, "support for education, working with other nurses who are clinically competent and nurse manager support" dimensions, the highest mean scores of staff nurses' experience in nursing were found in staff nurses group who have 1 to less than 5 years of experience in nursing, " 9.9 ± 1.77 , 14.0 ± 1.94 and 17.4 ± 3.31 " respectively. While, the lowest mean scores were found in the group of staff nurses who have 15 and more years of experience in nursing " 8.2 ± 1.24 , 11.9 ± 3.09 and 14.5 ± 3.48 " respectively.

As regards "control of and over nursing practice" dimension, the highest mean scores (19.7 ± 2.97) was found in the group of staff nurses with years of

experience ranging from 5 to 10 years while, the lowest mean score " 16.7 ± 3.40 " was found in the group of staff nurses with 15 years and more.

Table (6) shows a highly significant difference between staff nurses educational qualifications and EOM ($p = 0.002$). Moreover, no definite trend for mean score according to staff nurses' educational qualifications was observed.

Highly significant differences were found with "support for education, perceived adequacy of staffing, working with other nurses who are clinically competent and nurse manager support" dimensions where ($P = 0.00$). Moreover, a significant difference was found in relation to "a culture values concern for the patient" dimension where ($P = 0.029$).

In relation to "support for education" dimension the highest mean score " 9.8 ± 1.61 " was found with staff nurses who have Bachelor Degree of Science in Nursing, and the lowest mean score " 7.8 ± 2.06 " was found with staff nurses who have other qualifications. Concerning "perceived adequacy of staffing" dimension the highest mean score " 16.3 ± 2.21 " was found with staff nurses graduated from Technical Health Institute and the lowest mean score " 13.3 ± 0.50 " was found with nurses who have other qualification.

As regards "working with other nurses who are clinically competent" dimension the highest mean score " 14.1 ± 2.30 " was detected with nurses who have Bachelor Degree of Science in Nursing and the lowest mean score " 11.3 ± 1.50 " with nurses who graduated from Technical Health Institute.

In relation to "nurse manager support" and "a culture values concern for the patient" dimensions the highest mean scores " 17.4 ± 2.98 , 23.6 ± 4.25 " respectively were found with nurses who held Bachelor Degree of Science in Nursing. On the other hand, the lowest mean scores " 14.3 ± 3.34 , 20.3 ± 4.01 " were found with staff nurses who hold Diploma of Secondary Nursing School.

Table (1): Staff Nurses' Demographic Characteristics at Alexandria German hospital:

Demographic characteristics	Staff nurses (n = 87)	
	No	%
Type of Units:-		
Emergency room	13	14.95
Operating room	12	13.80
Intensive Care Unit	21	24.13
In-patient Care Units	37	42.52
Hemodialysis	4	4.60
Age (years):-		
< 30 -	65	74.71
30 – 39	12	13.80
40 +	10	11.49
Years of experience in nursing:-		
1 -	46	52.87
5 -	18	20.69
10 -	10	11.50
15 +	13	14.94
Educational Qualifications:-		
- Secondary Nursing School Diploma	16	18.40
- Technical Health Institute	7	8.04
- Bachelor of Nursing Science	60	68.96
- Others (Diploma + Specialty)	4	4.60
Total	87	100.00

Table (2): Level of magnetism as perceived by staff nurses at Alexandria German Hospital (n = 87).

Essentials of magnetism dimensions	Levels	N	%
Positive nurse/ physician relationships	Moderate	80	92.0
	Low	7	8.0
Support for education	High	9	10.3
	Moderate	77	88.5
	Low	1	1.1
Autonomous nursing practice	High	13	14.9
	Moderate	74	85.1
Control of and over nursing practice	High	12	13.8
	Moderate	74	85.1
	Low	1	1.1
Perceived adequacy of staffing	High	17	19.5
	Moderate	70	80.5
Working with other nurses who are clinically competent	High	8	9.2
	Moderate	76	87.4
	Low	3	3.4
Nurse manager support	High	5	5.7
	Moderate	75	86.2
	Low	7	8.0
A culture values concern for the patient	High	8	9.2
	Moderate	77	88.5
	Low	2	2.3
Overall total essentials of magnetism	High	2	2.3
	Moderate	85	97.7

Total mean score percent < 33.3% low level <
66.6% moderate level >66.6 high level

Table (3): Relationship between Staff Nurses' Age and their perception of Essentials of Magnetism Dimensions (EOM).

Essentials of Magnetism Dimensions	Staff Nurses' Age						F	Sig.
	≤30 (n=65)		30≤39 (n=12)		40+ (n=10)			
	Mean	±S.D	Mean	±S.D	Mean	±S.D		
Positive nurse/physician relationship	11.7	2.09	10.4	1.68	11.4	2.88	1.854	0.163
Support for education	9.7	1.73	9.0	1.48	7.9	1.20	5.747	0.005*
Autonomous nursing practice	21.6	2.88	21.8	2.42	22.0	1.89	0.075	0.928
Control of and over nursing practice	19.0	2.84	18.6	3.15	15.6	2.91	6.174	0.003*
Perceived adequacy of staffing	15.5	1.56	15.0	1.04	15.3	1.42	0.503	0.607
Working with other nurses who are clinically competent	13.8	2.41	12.5	2.11	11.2	2.86	5.857	0.004*
Nurse manager support	17.2	2.99	16.2	3.27	13.6	3.50	5.991	0.004*
A culture values concern for the patient	23.0	4.27	22.6	3.85	21.1	4.53	0.923	0.401
Total	131.6	11.53	126.0	11.22	118.1	12.81	6.423	0.003*

* Statistically significant at $P \leq 0.05$

Table (4): Relationship between Staff Nurses' Type of Units and their perception of Essentials of Magnetism (EOM) Dimensions.

Essentials of Magnetism Dimensions	Type of Units										F	Sig.
	Emergency (n=13)		OR (n=12)		ICU (n=21)		Hemodialysis (n=4)		In-patient (n=37)			
	Mean	±S.D	Mean	±S.D	Mean	±S.D	Mean	±S.D	Mean	±S.D		
Positive nurse/physician relationship	10.8	2.31	10.2	1.27	12.0	1.88	8.5	1.00	12.2	2.09	5.835	0.000*
Support for education	8.9	1.89	8.8	.97	10.1	1.65	7.5	1.73	9.6	1.72	3.248	0.016*
Autonomous nursing practice	21.5	2.96	23.6	2.07	21.2	3.05	21.8	1.50	21.4	2.54	1.790	0.139
Control of and over nursing practice	19.2	3.69	19.3	3.19	18.6	3.37	18.8	1.89	18.2	2.75	0.423	0.792
Perceived adequacy of staffing	15.0	1.73	15.2	1.64	15.0	1.34	16.3	1.26	15.7	1.39	1.436	0.230
Working with other nurses who are clinically competent	13.5	3.18	11.4	1.88	14.1	1.92	10.3	1.26	13.8	2.48	4.552	0.002*
Nurse manager support	16.8	1.86	13.6	2.50	17.4	3.32	11.3	3.77	17.7	2.69	9.124	0.000*
A culture values concern for the patient	22.4	2.53	19.8	2.60	22.9	4.70	17.8	2.06	24.3	4.21	4.976	0.001*
Total	128.1	11.03	121.7	9.21	131.3	13.27	112.0	6.48	132.9	11.27	4.810	0.002*

* Statistically significant at $P \leq 0.05$ **Table (5): Relationship between staff nurses' years of experience in nursing and their perception of essentials of magnetism (EOM) dimensions.**

Essentials of Magnetism Dimensions	Staff nurses' years of experience in nursing								F	Sig.
	≤5 (n=46)		5≤10 (n=18)		10≤15 (n=10)		15+ (n=13)			
	Mean	±S.D	Mean	±S.D	Mean	±S.D	Mean	±S.D		
Positive nurse/physician relationship	11.8	2.06	11.4	2.38	10.5	1.51	11.4	2.57	1.004	0.395
Support for education	9.9	1.77	9.2	1.63	9.0	1.56	8.2	1.24	3.903	0.012*
Autonomous nursing practice	21.6	2.92	22.0	2.97	20.8	2.10	22.2	1.88	0.612	0.609
Control of and over nursing practice	18.8	2.80	19.7	2.97	17.9	3.07	16.7	3.40	2.871	0.041*
Perceived adequacy of staffing	15.3	1.48	15.4	1.82	15.3	1.16	15.5	1.33	0.088	0.966
Working with other nurses who are clinically competent	14.0	1.94	13.2	3.33	12.4	1.96	11.9	3.09	3.024	0.034*
Nurse manager support	17.4	3.31	16.7	2.40	16.0	3.16	14.5	3.48	3.024	0.034*
A culture values concern for the patient	23.0	4.37	23.4	4.29	22.5	3.98	21.2	3.96	0.767	0.516
Total	131.8	12.11	131.0	11.34	124.4	10.08	121.7	13.12	3.160	0.029*

* Statistically significant at $P \leq 0.05$

Table (6): Relationship between Staff Nurses' Educational Qualifications and their perception of Essentials of Magnetism (EOM) Dimensions.

Essentials of Magnetism Dimensions	Educational Qualifications								F	Sig.
	Diploma of secondary nursing school (n=18)		Diploma of Technical health institute (n = 7)		Bachelor science of nursing (n = 60)		Other qualifications (n = 4)			
	Mean	±S.D	Mean	±S.D	Mean	±S.D	Mean	±S.D		
Positive nurse/physician relationship	10.3	2.27	11.3	1.25	11.9	2.16	11.0	1.15	2.652	0.054
Support for education	8.6	1.75	8.6	1.40	9.8	1.61	7.8	2.06	4.545	0.005*
Autonomous nursing practice	22.2	2.99	21.9	2.27	21.6	2.73	21.5	2.38	0.231	0.875
Control of and over nursing practice	19.1	2.36	17.4	1.27	18.7	3.36	16.8	2.22	1.010	0.393
Perceived adequacy of staffing	15.1	1.34	16.3	2.21	15.5	1.33	13.3	.50	4.500	0.006*
Working with other nurses who are clinically competent	11.5	2.68	11.3	1.50	14.1	2.30	12.8	1.89	7.469	0.000*
Nurse manager support	14.3	3.34	14.9	3.58	17.4	2.98	17.0	.82	5.296	0.002*
A culture values concern for the patient	20.3	4.01	22.1	3.08	23.6	4.25	20.8	2.63	3.165	0.029*
Total	121.4	12.12	123.7	7.45	132.6	11.86	120.8	5.32	5.528	0.002*

* Statistically significant at $P \leq 0.05$

4. Discussion

An excellent hospital nurse work environment is one in which nurse leadership provides the right structures, practice and people. This enables clinical nurses to do the right things correctly, thus producing desired outcome for patients, staff and the organization.⁽¹⁸⁾

The majority of staff nurses perceived moderate level of magnetism at Alexandria German Hospital regarding all EOM dimensions. Where, the highest percentage of staff nurse perceived moderate level of "positive nurse/ physician relationships" dimension, however, the lowest percentage of them "perceived adequacy of staffing" dimension as moderate level.

This could be attributed to the fact that, the highest percentage of the staff nurses under study were professional nurses who studied how to communicate effectively with other health care providers, specially physicians as well as they may perceive them as colleagues and treat them with trust and respect. Moreover, physician may treat staff nurses in their units as equal, they need their assessment, observation and reports of their patients' conditions and nurses need medical knowledge and skill to improve their patient outcomes.

This finding goes with Upenieks (2003) who stated that there is a positive working relationships between nurses and physician at magnet hospital. Moreover, high quality patient care outcomes demand that

physician, nurses and other professionals practice collegially and collaboratively.⁽⁶⁾

In relation to, "perceived adequacy of staffing" dimension the highest percentage of the study subjects were young with less experience, they might have basic work in addition to their working in private hospital with higher salary to improve their socioeconomic state, which makes them work for about 12 hours/day. This might increase their feeling of exhaustion that in turn them come late to hospital or being absent, thus increasing the work load for the other staff nurses. All these might lead to increased staff nurses leave hospital, feeling bored and dissatisfied which finally influences the adequate level of staffing.

In this respect, Al Ateeque (2008) stated that the nursing shortage has accelerated over the past decade, causing hospital administrators and nurse leader more conscious of staff nurses work environment and its impact on the workforce. Providing a work environment that magnetizes nurses and fosters excellence becomes crucial to attracting and maintaining new graduates, improving new nurse turnover and ensuring safe care.⁽¹⁰⁾

In addition to, no significant difference was detected in relation to "autonomous nursing practice" dimension with all staff nurses demographic characteristics. This may be attributed to the culture concern for autonomous nursing practice is not embedded in this hospital, not stressed by nurse

managers. In addition, staff nurses are not well trained are not rewarded for practicing autonomous decision making. This result was supported by Mensik (2006) who found that registered nurses' perceived more control over practice than decisions related to their practice setting, and organizational autonomy is not fully reflected in the practice model used by health care agencies.⁽²¹⁾

However, American Association of Critical Care Nurses (AACN), (2006) assured that health care organizations recognized for attracting and retaining nurses have successfully implemented professional care models that support autonomous nursing practices.⁽²²⁾ Moreover, Haller (2011) concluded that, the magnet program provides a good framework for granting high level of staff autonomy.⁽²³⁾ In addition to, the University of Rochester "Department of Nursing Practice", (2012) stated that, the original description of magnet framework was generated as an outgrowth of a study of 41 hospitals identified as "magnet" for nurses. Each of these hospitals was characterized by a high level of nurse autonomy.⁽²⁴⁾

It was evident from the results of this study that, significant differences were detected with total EOM dimensions with all demographic characteristics of staff nurses. This could be clarified due to varied staff nurses age, type of units, experience, and educational qualification which in-turn might lead to change of in their perception.

In this regards, Ulrich *et al.* (2007) reported that 715 nurses (21% of the sample) in magnet hospitals rated quality of care significantly higher than did their counterparts in non-magnet hospital. Moreover, magnet status continued to be the dominant source of significant difference in variance.⁽⁷⁾

Concerning the relationships between EOM dimensions and staff nurses demographic characteristics. In relation to "**positive nurses/physicians relationships**" dimension the only significant difference was found with type of units where the highest mean score was found in in-patient care units, followed by ICU units. This result could be attributed to that the positive nurses physicians relationships in these units may be in sort of collegial relation, trust, respect, and collaborating with each other. Also, they may exchange information between themselves informally and have more contact with each other for a long period of time than the other units. However, the least mean score was found in hemodialysis unit this may due to that positive nurses physicians relationships working hours with each other was less than in in-patients and ICU units.

In this respect, Schmalenberg *et al.* (2009) assumed that a positive nurse/ physician relationship constitutes of collegial, collaborative, student –

teacher relationship, friendly stranger relationship and adversarial relationship.⁽²⁵⁾

In contrast, Elithy *et al.* (2011) concluded that, there were significant relationships among all dimensions with exception of nurse physician relationship dimension.⁽²⁶⁾

As regards "**Support for education**" dimension, it was found that, there were significant differences between this dimension and all staff nurses' demographic characteristics, where the highest mean score were found with youngest staff nurses', who are working in ICUs and have less experience in nursing and hold Bachelor Degree. This may be attributed to that, these staff nurses may seek support for education from their nurse managers who may give them chances to participate in continuing education through attending conferences, panel discussion, reading assignment, sharing in workshops to be competent in their clinical practice.

This result was supported by Kramer *et al.* (2008), who stated that support for education is based on availability of educational program, opportunities and practices that foster development of competency.⁽²⁷⁾ Moreover, Nazarko (2007), Schmalenberg *et al.* (2008) and Blaridge (2008) assured that staff nurses are to receive the support for education required to enable them to provide care that meets the needs of the sickest patients and improving excellence performance.⁽²⁸⁻³⁰⁾

As regards to, "**control of and over nursing practice**" dimension there were significant differences with staff nurses' age and their experience in nursing where, the highest mean score was found with youngest staff nurses' with less experience in nursing. This may be attributed to that the youngest staff nurses may participate in different hospital committees through which staff nurses control nursing practice in this hospital as well as they may control over unit issues that directly affected them such as floating system, type of uniform and infection control...etc.

In this respect, Kramer and Schmalenberg (2003), indicated that effective control of and over nursing practice requires some kind of empowered, formal organization structure, extending beyond clinical decision making at the patient care interface.⁽³¹⁾

In contrast, Kramer and Schmalenberg (2009) stated that almost 60% of the magnet hospital staff nurses stated that little or no control of and over nursing practice have existed.⁽³²⁾

In relation to "**perceived adequacy of staffing**" dimension, a significant difference was found with different staff nurses' educational qualification where the highest mean score was found with staff nurses who graduated from Technical Health Institute. This may be attributed to that graduates may be hard worker, have no intention to leave the hospital because

they may be satisfied with their salary, working conditions and type of supervision; and this may decrease nurse/ patient ratio and decrease their work load that in turn affects providing quality patient care. This results was supported by Schmalenberg *et al.* (2008) and Haley and Dolorescol (2004).^(29,33)

In contrast, the American Hospital Association (2002), Institute of Medicine (2004) and Hall (2005) stated that, lack of productive healthy work environment has been related to nursing shortage, poor quality of nurses work lives, nurse job dissatisfaction, poor quality and unsafe patient care.⁽³⁴⁻³⁶⁾

Concerning "**Working with other nurses who are clinically competent**" dimension, significant differences with all staff nurses' demographic characteristic were detected, where the highest mean scores were found with youngest staff nurses with less experience in nursing working in ICUs, and holding Bachelor Degree. This could be clarified by the fact that these graduates are well trained in various specialties during education as well as in internship year, especially in ICUs, they practice decision making during their providing care for patients, all of these might prepare them to be competent nurses who care for critically ill patients who need nurses with special talents and skills to meet their needs and expectations.

In this respect, Sherman *et al.* (2009) stated that nurses feel very comfortable when having a clinical competence from nurses found in their units to support their nursing practice and give them important feedback to further develop their skills in caring for complex patients.⁽³⁷⁾

Moreover, Model (2007) and Lombardo (2011) clarified that working with other nurses who are not clinically competent may lead to job dissatisfaction, decrease productivity and increase turn over ... etc.^(38,39) In addition, Jones *et al.* (2010) assured that nursing as well as patient outcomes may be compromised by incompetent practice.⁽⁴⁰⁾

As regards "**nurse manager support**" dimension, significant differences were detected in relation to all staff nurses' demographic characteristics. The highest mean score were found with youngest staff nurses with least years of experience, holding Bachelor Degree and working in In-patient Care Units. This may be attributed to the fact that the nurse manager in In-patients Care Units may directly be involved with day – to – day directions, they may also provide immediate feedback, provide positive reinforcement and recognition when staff nurses work together to improve patient care, provide needed resources to all staff to get the job done.

In this regard, Schmalenberg *et al.* (2005) stated that nurse manager can support her staff nurses

through making expectations clear and known, listen without judging, suggest alternative approaches and provide feedback, work as a role model, for a collaborative approach and stressing collaboration not competition bringing together partnership equity, responsibility and authority.⁽⁴¹⁾

In contrast, Kramer and Schmalenberg (2004) indicated that only 9.6% of graduates nurses had any interest in nurse managerial support.⁽⁴²⁾

Regarding "**a culture that values concern for the patient**" dimension, significant differences were detected concerning staff nurses working in different type of units and their educational qualifications, where the highest mean score was found with staff nurses working in In-patient Care Units, holding Bachelor Degree. This may be attribute to that the values concern for the patient is paramount in this hospital, especially these units because this may be a value driven organization in which values are known, understood and shared. Also, good patient care comes first in these units, and nurse managers make their efforts to transmit their culture values to new employed staff nurses, and all health care provider.

This result is consistent with Schmalenberg *et al.* (2005) who stated that our values, our common good of concern for the patient is embedded in our culture.⁽⁴¹⁾ Moreover, Kramer *et al.* (2008) mentioned that culture value concern for patient drive both the quality of nurses work lives and the quality patient care. In addition, creating these culture values enables the essentials of magnetism not only increases nurses' satisfaction with work but also improves the quality patient care to the end of the day, nurses, patients, and hospitals all come out ahead.⁽²⁷⁾

Conclusion and Recommendations

Staff nurses perceived moderate level of magnetism at Alexandria German Hospital. In addition, significant differences were found with different EOM dimensions in relation to demographic characteristics of staff nurses except for "**autonomous nursing practice**" dimension.

Recommendation

Recommendations for nurse manager.

1. Awareness in service training program for staff nurses and different levels of nurse manager as well as all other health care provides about magnet process and essentials of magnetism dimension should be developed.
2. Strives to award magnetic designation to have a competitive advantage in the requirement of all nurses as well as for health care providers to enjoy working in attractive practice environment are needed.

3. Autonomous nursing practice through providing staff nurses opportunities for taking autonomous decision making and enhancing shared governance culture, through attending in-service training program in this regards should be stressed.
4. Extra efforts through improving compensation packages and creative scheduling options until aggressing recruitment efforts by educational programmes that could increase the supply of the available staff are to be exerted.

Recommendations for further study:

1. Study the relationship between essentials of magnetism and staff nurses turnover intention to leave.
2. Study the factors hindering autonomous nursing practice.

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