

Nurses' Perception toward Essentials of Magnetism at Kafr El-Shaikh General Hospital

Safaa Abu Elsoued Ahmed ⁽¹⁾, Mayada Hassan Elzohairy ⁽²⁾,
Neamat Mohamed ElSayed ⁽³⁾

⁽¹⁾ Nursing Inspector Directorate of Health Affairs in Kafr El Sheikh.

⁽²⁾ Lecturer of Nursing Administration, Faculty of Nursing, Damanhour University.

⁽³⁾ Professor of Nursing Administration, Faculty of Nursing, Damanhour University.

DOI: <https://doi.org/10.5281/zenodo.8198902>

Published Date: 31-July-2023

Abstract: Magnet hospital is stated to be one where nurses deliver excellent patient outcomes, with nurses have a high level of job satisfaction, and low staff nurse's turnover rate. The idea is that magnet nursing leader's value staff nurses, involve them in shaping research-based nursing practice, and encourage and reward them for advancing in nursing practice. **Aim of the Study:-** Assess nurses' perception toward essentials of magnetism at Kafr El-Shaikh General Hospital. **Kafr El-Shaikh Governorate Study design:** A descriptive research design. **Setting:** The study was conducted in all inpatient units (n=17) at Kafr El-Shaikh General Hospital. **Subjects:** The sample Included 192 technical nurses and 100 professional nurses at the previous mentioned settings who are available during data collection. **Tool:** One tool used in this study, Essentials of Magnetism Questionnaire. **Results and Conclusion:** - The result of the present study revealed that, the majority of studied nurses got moderate perception of essentials of magnetism. **Recommendation** Support staff nurses to participate in work design, problem solving, conflict resolution, committees and organizational decision-making workshops as "key ingredients to successful organization".

Keywords: Nurses' Perception and Essentials of Magnetism.

1. INTRODUCTION

Magnet hospitals with a more different organizational structure play an important role in nurses' job satisfaction and retention. One of the main reasons for the attractiveness of these hospitals is the existence of work environments focusing on decentralized decision-making, autonomy, control over practice, resource adequacy, supportive management, effective inter-professional communication, and career development. In other words, the organizational attributes of magnet hospitals lead to the nurses' empowerment by increasing autonomy and authority, and subsequently improving job satisfaction. (Rivaz et al. 2018)

Kutney et al. (2015) defined magnet as "the highest national recognition awarded to a hospital or medical center for excellence in nursing". It is accepted nationally as the gold standard of patient care and provides healthcare consumers with a benchmark to measure quality of nursing care. Kramer et al. (2012) indicated eight attributes of essential of magnetism, namely: nurse physician relationships: collaborative and collegial relationships between nurses and physician; support for education: the extent to which staff nurses say that their organization supports education; autonomous nursing practice: autonomy is the freedom to make independent clinical decisions, in the best interest of the patient; control over nursing practice: a participatory process through which nurses have input and engage in decision making about practice, policies and issues, as well as personal issues affecting nurses; perceived adequacy of staffing: nurses in the unit feel that most of the time they are adequately staffed to give quality patient care; working with clinically competent nurses: specially certification, degree of education...etc.; head nurses support indicates leadership behavior and managerial behavior and a culture of the patient care :a patterned, shared system of values guiding members.

Aim of the Study

This study aims to assess nurses' perception toward essentials of magnetism at Kafr El-Shaikh General Hospital.

Research Question

What is the nurses' perception toward essentials of magnetism at Kafr El-Shaikh General Hospital?

2. MATERIALS AND METHODS**I- Materials.**

Study design: A descriptive research design was used to conduct this study.

Setting:

The study was conducted in all inpatient units (n=17) at Kafr El-Shaikh General Hospital, which was affiliated to Ministry of Health and Population with bed capacity 403 beds. The inpatient units were classified into: medical unit (n=2), surgical unit (n=3), critical unit (n=3), obstetric unit (n=2), burns unit (n=1), orthopedic unit (n=2), urology unit (n=2), diabetic unit (n=1) and finally pediatric unit (n=1).

Subjects:

The sample was including 192 technical nurses and 100 professional nurses at the previous mentioned settings who were available during data collection. The calculation of sample size was done based on power analysis, with confidence level 95%, when total technical nurses were 522 nurses and total professional nurses were 148 professional nurses.

Tool:

One tool was used in this study:

Essentials of Magnetism Questionnaire (EMQ):

The Essentials of Magnetism Questionnaire (EMQ) developed by Kramer et al. (2012) and adapted by Mohammed (2019) to assess nurses' perception toward essentials of magnetism. It consists of 56 items divided into eight dimensions as following: Nurse physician relationship (6items); Support for education (3items); Autonomous nursing practice (8 items); Control over nursing practice (8 items); Perceived adequacy of staffing (6 items); Working with clinically competent nurses (4 items); Head nurse support (10 items); and finally a culture of the patient care (11 items). Responses was measured on three point Likert scale ranging from (1) never, (2) sometimes and (3) always. The score was divided to low level = $\leq 60\%$ score; moderate level = $60\% < 75\%$ score; and high level = $\geq 75\%$ score.

Besides, personal characteristics data sheet that was developed by the researcher and was include questions about: age, gender, unit, years of experience, educational qualification.

II. Methods

Approval of the ethics committee of the faculty of nursing was obtained. An official approval to conduct this study was obtained after providing explanation of the aim of the study. An informed consent was obtained from the healthcare providers and patients/clients. The study tool was tested for content validity by 5 experts in the field of the study. The necessary modifications were done accordingly. A pilot study was carried out on 10% of the study sample in order to test the clarity and applicability of the research tool, the tool of the study was tested for its reliability using cronbach's alpha test, the result was reliable demographic characteristics 0.805 and essentials of magnetism (EMQ) tool 0.901.

Data collection was conducted by the researcher through hand- delivered questionnaire to staff nurses, after individualized interview with each nurse for about 5 minutes to explain the aim of the study and the needed instructions were given before the distribution of the questionnaire in their settings. Every nurse took 10 minutes to fill it. Data collection took three months from the beginning of August to the end of November 2020.

Ethical considerations:

Written informed consent was obtained from patient after explaining the aim of the study and the right to refuse to participate in the study and/ or withdraw at any time. Patient's/client's privacy was respected. Data confidentiality and anonymity regarding data collection was maintained during implementation of the study.

Statistical analysis

The collected data was revised, categorized, coded, computerized, tabulated and analyzed using Statistical Package for Social Sciences (SPSS) version 22. Reliability of the tool was determined by Cronbach's alpha and presented in descriptive, and association forms. The necessary tables were then developed.

3. RESULTS

Table 1: reveals that the studied nurses age mean 40.13 ± 7.80 years. 85.3% of the studied nurses were female and 14.7% were male. 16.8% of the studied nurses were working at medical and critical units followed by 14.4% of them working at surgical unit. 39.4% of the studied nurses were less than 10 years of experience. Regarding to educational qualification 38.7% of the studied nurses had Technical Institute of Nursing followed by above one third (34.2%) had Bachelor of Nursing Science.

Table (1) Number and percentage distribution of the studied nurses according to their personal characteristics.

Items	N	%
Age		
< 25	27	9.2
25 - <40	130	44.5
40 or more	135	46.3
Mean± SD 40.13±7.80		
Gender		
Male	43	14.7
Female	249	85.3
Working unit		
Medical unit	49	16.8
Surgical unit	42	14.4
Critical unit	49	16.8
Obstetric unit	37	12.7
Orthopedic unit	32	10.9
Urology unit	20	6.8
Diabetic unit	26	8.9
Pediatric unit	37	12.7
Years of experience		
1 - <10	115	39.4
10 - <20	75	25.7
20 - <30	60	20.5
30 - <40	42	14.4
Mean± SD		
Educational Qualification		
Diploma of Nursing School	79	27.1
Technical Institute of Nursing	113	38.7
Bachelor of Nursing Science	100	34.2

Table 2: shows the distribution of the studied nurses' regarding total essentials of magnetism, 42.1% of the studied nurse's demonstrated moderate total magnetism while 34.6% of them reported high total essentials of magnetism. 51.7% of the studied reported high head nurse support. 46.2% of the studied reported moderate nurse-physician relationship. 44.5% of the studied reported moderate autonomous nursing practice. 45.2% of the studied reported moderate perceived adequacy of staffing. 43.1% of the studied reported moderate Support for education.

Table (2) Number and percentage distribution of the studied nurses regarding total essentials of magnetism questionnaire.

Items	High		Moderate		Low	
	N	%	N	%	N	%
Nurse-physician relationship	104	35.6	135	46.2	53	18.2
Support for education	75	25.7	126	43.1	91	31.2
Autonomous nursing practice	107	36.6	130	44.5	55	18.9
Control over nursing practice	99	33.9	122	41.8	71	24.3
Perceived adequacy of staffing	81	27.7	132	45.2	79	27.1
Working with clinically competent nurses	98	33.6	114	39.0	80	27.4
Head Nurse support	151	51.7	119	40.8	22	7.5
A culture of the patient care	110	37.7	115	39.4	67	22.9
Total	101	34.6	123	42.1	68	23.3

Table 3: shows that there was highly significant relationship between total essential of magnetism and educational qualification”, where P = (0.000) and there was significant relationship between total essential of magnetism and “age and year of experience”, where P= (0.015, 0.040), consequently. But, there were no significant relationship between total essentials magnetism and “gender and unit”.

Table (3) Relationship between personal characteristics of studied nurses and their total essentials of magnetism

Items		Total essentials of magnetism						X ²	P-Value
		High (n=101)		Moderate (n=123)		Low (n=68)			
		N	%	N	%	N	%		
Age	< 25	0	0	2	1.6	25	36.8	7.112	.015*
	25 - <40	12	11.9	81	65.9	37	54.4		
	40 – or more	89	88.1	40	32.5	6	8.8		
Gender	Male	14	13.9	22	17.9	7	10.3	2.242	0.124
	Female	87	86.1	101	82.1	61	89.7		
Unit	Medical unit	17	16.8	21	17.1	11	16.2	1.007	0.187
	Surgical unit	14	13.9	17	13.8	11	16.2		
	Critical unit	16	15.8	22	17.9	11	16.2		
	Obstetric unit	13	12.9	16	13	8	11.8		
	Orthopedic unit	12	11.9	15	12.2	5	7.4		
	Urology unit	6	5.9	7	5.7	7	10.3		
	Diabetic unit	9	8.9	9	7.4	8	11.8		
Pediatric unit	14	13.9	16	13	7	10.3			
Yearsof experience	1 - <10	5	4.9	65	52.8	45	66.2	10.55	0.040*
	10 - <20	7	6.9	49	39.8	19	27.9		
	20 - <30	55	54.5	4	3.3	1	1.5		
	30 - <40	34	33.7	5	4.1	3	4.4		
Educational qualification	Diploma of nursing	2	2.0	22	17.9	55	80.9	13.10	.000**
	Technical Institute	10	9.9	90	73.2	13	19.1		
	Bachelor of nursing	89	88.1	11	8.9	0	0		

*Significant at p <0.05. **Highly significant at p <0.01. Not significant at p>0.05

4. DISCUSSION

Personal characteristics of the staff nurses

Total number of staff nurses who shared in this study was 192 technical nurses and 100 professional nurses from all inpatient units (n=17) at Kafr El-Shaikh General Hospital, which were available during data collection. Concerning age, nearly half of staff nurses have more than 40 years old. Moreover, this study results indicated that the majority of staff nurses were females and working in critical care unit and medical units. Furthermore, above one third of the studied nurses had from 1 - 10 years of experience in their current work units and the majority of studied nurses had Technical Institute of Nursing.

Essentials of magnetism

Regarding essentials of magnetism, the result of the current study shows that the majority of the studied nurses demonstrated moderate perception of essentials of magnetism. This result may be related to the improvement of nursing care that head nurses always directly involved in day-to-day direction and management of unit activities, they supported nurses in work in case of conflict among nurses, nurses' participate in decision making and has a considerable effect on the performance of healthcare organizations, good relationships between physicians and nurses consist of cooperation, trust and respect and autonomy. This result agreed with a study at Fayoum University Hospital in Egypt, by El Meghawri, Shazly, and Hussien (2017), who showed that less than half of the studied nurses demonstrated a moderate perception of the essential of magnetism. Furthermore, the study at Dutch Teaching Hospital, in Netherlands by Bloemhof et al., (2021) showed that about two thirds had a moderate perception toward essential of magnetism, and the first rank dimension of magnetism was head nurse's support. Moreover, this result agreed with a study at a private hospital in Cairo, Egypt, by El-Shemy et al., (2021), who reported that about three quarter of the studied nurses satisfied regarding their perception of essential of magnetism.

Relationship between essentials of magnetism and personal characteristics.

Regarding **age**, the result of the present study represented that there was statistical significant relationship between total essential of magnetism and age. Less than half of studied nurses who had more than 40 years got high perception of magnetism and nearly two thirds who had from 25-40 years, got moderate perception of essential magnetism. This result may be related to old staff nurses is more aware of hospital policies, goals, and objectives, more skilled, more competent, and less dependent, and has more freedom to express their ideas and suggestions and participate in making unit decisions. This finding is consistent with a study at University of Alexandria in Egypt, by Elzohairy (2014), who showed that the majority of nurses who had from 30 to 40 years old and more than 40 years old, got moderate perception of essential of magnetism. Moreover, This finding is consistent with a study at Benha University Hospital in Egypt, by Mohammed (2019), who showed that the majority of nurses who had from 25 to 30 years old got high perception of essential of magnetism.

Regarding **gender**, the result of the present study represented that the highest percentage of nurses are female and got high level of essential of magnetism. This result is may be related to female nurses is more accountable, more caring, competent, compassionate, dedicated, hardworking, and have good communication skills to convey the message that nurses are professional and capable caregivers who are committed to providing high-quality care. This finding agreed with a study at Benha University Hospital in Egypt, by Mohammed (2019), who showed that the majority of female nurses, got high perception of essential of magnetism. Furthermore this finding is consistent with a study at Fayoum University Hospital in Egypt, by El meghawri, Shazly, and Hussein (2017), who showed that the higher percentage of female nurses agreed upon magnetism compared with male ones.

Regarding **working unit**, the present study showed that the highest percentage of nurses who working in medical units, followed by critical care unit, got high perception of essential of magnetism. This result may be related to nursing in critical unit make important decisions, and they use their abilities to understand situations to evaluate patients, provide direct patient care and using case management to establishing nursing practice standards, developing quality assurance procedures, and directing complex nursing care systems because most of them have higher educational qualifications. This finding is agreed with a study at Alexandria German Hospital in Egypt, by El-Bialy and Abd Elaal (2013), who showed that the highest mean score was found in in-patient care units, followed by ICU units, who got high perception of essential of magnetism.

Regarding **years of experience**, the result of the current study represented that there was statistical significant relationship between total essential of magnetism and years of experience. Above one half of the studied nurses had from 20 to 30 years of experience, got high perception of essential of magnetism. This result may be related to their leadership, supervision and

ability to manage changes, as well as their communication and relational skills. They have the ability to act reflectively, plan, systematize and consistently assess; they also show more dexterity. This finding is agreed with a study at Alexandria Medical Research Institute in Egypt, by Abou Hashish, and Fargally (2018), who reported that one third of study subjects had more than 20 years of experience got high perception of essential of magnetism. On the other hand, this finding is disagreed with a study at Gazi University, Ankara in Turkey, by Yildirim, Kısa, and Hisar (2012), who reported that more than one third of the studied nurses had less than 10 years of experience, got high perception of essential of magnetism. Moreover, this results disagreed with the study at Benha University Hospital in Egypt, by Mohammed (2019), who showed that less than half of studied nurses had more than 10 years of experience, got high perception of essential of magnetism.

Regarding **educational qualification**, the result of the present study represented that there was highly statistical significant relationship between total essential of magnetism and educational qualification. The majority of studied nurses had a Bachelor of Nursing and got high level of essential of magnetism. This result may be related to nurses with high qualification offering significantly better work environments and they have opportunities for professional development, participation in decision making and serious continuous teaching to understand perception of essential of magnetism. This result agreed with a study at King Fahd Military Hospital and King Faisal Military Hospital in the Kingdom of Saudi Arabia, by Alshahrani, Banjar, and Mahran (2018), who reported that more than half of the studied nurses, who had Bachelor of Nursing Science, got high perception of essential of magnetism. Moreover, this finding agreed with a study at Egypt by El shemy et al., (2021), who showed that above three quarters of the studied nurses having bachelor degree, got high level of essential of magnetism.

5. CONCLUSION

The result of the present study revealed that, the majority of studied nurses got moderate perception of essential of magnetism. The highest dimension was nurse-physician relationship followed by perceived adequacy of staffing, autonomous nursing practice, support for education, control over nursing practice, head nurse support, a culture of the patient care and finally the lowest dimension was working with clinically competent nurses.

In the light of the results of the current study, the following recommendations can be suggested:

Organization and head nurse should:-

- 1- Support staff nurses to participate in work design, problem solving, conflict resolution, committees and organizational decision-making workshops as “key ingredients to successful organization”
- 2- Provide the capabilities and requirements necessary to improve and develop work within hospitals.
- 3-Giving nurses the chance to work in an autonomous manner that makes innovation and creativity flourished side by side with accountability.
- 4- Encourage staff nurses to participate in in- service training program to improve their skills and practice.
- 5-Empowering staff nurses to have a voice in decision-making, thus encouraging diverse and creative input that will help in advance the healthcare mission of the organization and is recommended to improve their agreement upon magnetism.
- 6- Create an equitable work environment, and maintain open and clear communication with all staff members, through conducting frequent periodic meetings to discuss and identify their work problems and complaints.
- 7- Establish reinforcement strategies and a reward system for nurses who behave as ethical role models to enhance their effectiveness, efficiency, and loyalty.
- 8- Promote staff nurses' and physicians' mutual respect and co-operation related to patients' treatment decisions.
- 9- Offer continuous job training to improve staff nurses' skills practice, participative decision making, problem-solving, and performance.
- 10- Share the hospital mission and vision, and clarify the hospital goals with staff nurses, that help them to understand their roles and responsibilities in the hospital.
- 11- Provide nursing staff with professional development and training opportunities especially for strategic planning, goal setting, and conflict management, to enhance their team work, autonomy, sense of motivation, and empowerment.
- 12- Providing in service training program for staff nurses and different levels of nurse management as well as all other health care provides about magnet process and the importance of magnetism dimensions.

International Journal of Novel Research in Healthcare and Nursing

Vol. 10, Issue 2, pp: (170-176), Month: May - August 2023, Available at: www.noveltyjournals.com

Nurses' staff should:

1. Collaborate with their peers and work as a team for dealing with patients' care problems and issues.
2. Develop their problem-solving ability; participate in decision-making, skills practice, and performance through attending training program.
3. Improve their communication skills with the top level managers using social and emotional intelligence technique.
4. Promote nurses-physicians' mutual respect and co-operation related to patients' treatment decisions.
5. Follow the directions of other health professionals, who make the primary decisions about patients, also involve in the decision-making process.

Further studies should be conducted:

- Assess the relationships between infection control programs and magnetic hospital.
- Evaluate magnet hospital effectiveness on nurse's burnout and job satisfaction.
- Evaluate staff nurses outcomes in magnet and non-magnet hospitals.

REFERENCES

- [1] Abou Hashish E, Farghaly S. Assessment of professional nursing governance and hospital magnet components at Alexandria Medical Research Institute, Egypt. *Journal of Nursing Education and Practice* 2018;8(3).
- [2] Alshahrani F., Banjar H.Mahran, S. Magnet work environment at military hospitals as perceived by registered nurses in KSA. *J. Nurs. Health Sci.*2018; 7(1-07).
- [3] Bloemhof J, Knol J, Van M, Buurman M. The implementation of a professional practice model to improve the nurse work environment in a Dutch hospital: A quasi-experimental study. *Journal of Advanced Nursing.* (2021); 77(12)
- [4] El-Bialy G, Abd Elaal N. Essentials Of Magnetism As Perceived By Staff Nurses At Alexandria German Hospital. *Life Science Journal* 2013;10(4)
- [5] El meghawri R, Shazly M, Hussein F. Assessment of Essential of Magnetism in Nursing Practice Environment at Fayoum University Hospital, *Zagazig Nursing Journal*; 2017 (6): 13.2
- [6] El-Shemy I, El-Sayed A, Keshk Z, Helal H. Nursing Personnel' Perception about Magnetic Hospital Forces. *International Journal of Novel Research in Healthcare and Nursing* 2021; 8 (3): 148-158.
- [7] El-Zohairy M. The relationship
- [8] between nurses' perception
- [9] s of their work environment and patient safety culture, Unpublished Master thesis. Faculty of Nursing, University of Alexandria, 2014.
- [10] Kutney A., Stimpfel W., Sloane M., Cimiotti P., Quinn W., Aiken L. Changes in patient and nurse outcomes associated with magnet hospital recognition. *Medical Care* 2015;53(6): 50-57.
- [11] Kramer M., Schmalenberg C., Halfer D., Maguire P. Impact of healthy work environments and multistage nurse residency programs on retention of newly licensed RNs. *The Journal of Nursing Administration* 2012; 42(3): 48-59.
- [12] Mohammed M. Magnet hospital as perceived by nurses and its relation to patients, safety
- [13] goals. Unpublished Master Thesis. Faculty of Nursing. Benha University, 2019.
- [14] Rivaz M, Ebadi A, Momennasab M. The role of magnet hospitals in making the nursing practice environment attractive, *Journal of Hayat.* 2018; 23 (4):290-294.
- [15] Yıldırım D., Kısa S., HisF. Validity and reliability of the Turkish version of the Essentials of Magnetism Scale (EOM II). *International nursing review* w.2012; 59(4), 570-576.