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“Men in nursing” as viewed by male students in secondary schools

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ABSTRACT

Globally, the significant and increasing shortage of nurses is alarming. Male nurses have established their positions in hospitals and community health settings but their overall numbers remain suboptimal. Therefore, this study sought to explore and describe the views of secondary grade male students regarding men in the field of nursing in Egypt. The study was conducted at 2 secondary schools: Omar Makram and the Military Governmental Secondary Schools for boys in Damanhur, Egypt. A total number of 350 male students were recruited in the study and their perceptions and attitudes towards men in nursing were assessed using the Attitudes Towards Men in Nursing Scale (ATMINS), which was developed by Bartfay WJ *et al.*, in 2010. Interestingly, it was found that there is a general positive perception toward men in nursing. Specifically, the most apparent positive attitudes were in the direction to “Mass media portrayal of the male nurse as being gay or effeminate in nature which discourages males to choose it as a career” followed by “Mass media portrayal of nursing to be more suited to women which also discourages males to choose it as a career”. On the other hand, their negative perception and disagreement was toward “Encouragement male family members to pursue nursing as a challenging and rewarding career choice”. Therefore, “Media description”, “No specific job title for men” and “No role model” are the major factors that discouraged male students from choosing nursing as a future career. In contrast, “Gaining good income and travelling abroad” seemed to have potentially shifted their perception. Eligible students chose nursing as a prospective future career right after medicine, pharmacy and engineering. In conclusion, Male students in secondary grade seem to have a positive perception toward men in the nursing field but do not prefer it as a future career. Having said that, a considerable part of society reflects a limited attraction to the nursing profession even though they appreciate it. Future research is indeed warranted to investigate other key factors that may influence the overall male perception toward the profession of nursing.

Key Words: Men in nursing, Perception, Secondary school, Male students

1. INTRODUCTION

The nursing profession has suffered greatly from public stereotyping and for being strictly linked with femininity and non-masculinity. This view is subjective and based on peoples’ misunderstanding of nursing activities, image, practices and different personalities. However, the acute shortage

in nursing staff drives the field to encourage males to join a nursing career.^[1-3]

Currently, the majority of Arab and non-Arab countries experience this critical deficiency of nurses. Consequently, male nurse recruitment is recognized as a national and interna-

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tional priority. The nursing profession is an important line of work for human life itself. Yet, the lack of nurses is not a current incident, nor one limited to a definite ecological location.^[4,5]

Historically, male positions in nursing were negligible and nursing was mostly considered to be a female job. Whereas recently, men fit in taking care of patients and being competent in all nursing activities as are recorded in research evidence.^[6-8] Therefore, the challenging issue that confronts males in nursing is the stereotyping and cultural coping in entering a traditionally female profession. Moreover, lack of male role models and appropriate career preparation are also seen as barriers.^[4,9]

Accordingly, there are multiple issues that need to be tackled by men seeking a career in nursing. These include thoughts, feelings and convictions of not only the general public and patients but also professional fellow co-workers in nursing, as well as other colleagues within the medical profession in general. Social prestige, friends, physician-nurse interactions, nursing education, nurse preceptors, risk of violent exposure to health hazards and nursing education programs are other considerations that may be important deterrents for career entry.^[8,10,11] These challenges must be addressed in order to encourage adolescents' male, particularly those in male secondary schools, to study nursing.

In 2012, Abdel El-Halem *et al.* showed that the perceived image of nursing as a profession in the Egyptian community was not improved even when nursing was elevated to a university degree status. Thus, in order to recruit and retain male nurses, the profession is in desperate need of improving its image in the community given that its view is the most important barrier that hinders many men from claiming nursing as their livelihood.^[8,12]

The insight of secondary school male students about nursing is a crucial issue in order to estimate to which extent they will accept or reject nursing as a job. Perceptions, including mocking of male nurses, discourage boys in seriously considering nursing as a future career. The role of gender in the selection of a career is a tremendously important concept to be investigated since men constitute a minority percentage of nurses.

1.1 Significance and aim of the study

In Egypt, it is important to improve nursing status in the community and particularly in the minds of males. This study aims to explore and describe the view of male students regarding men in nursing sampled from secondary schools in Egypt. Insight gained from this inquiry can help in renovating the nursing recruitment process; inform curriculum

planners as well as society and devise retention strategies for the upcoming generations of nurses. This will be a valuable step in nursing education and health care service leading to better understanding and determining crucial factors that may influence the perceptions of male students regarding men in nursing.

1.2 Research questions

- (1) What are the perceptions of male students in secondary schools toward men in nursing?
- (2) What are the perceiving factors that affect the views of male students in secondary schools in relation to men in nursing?

2. MATERIALS AND METHODS

2.1 Research design

The research was designed as an exploratory descriptive design.

2.2 Study setting

This study was conducted at Omar Makram (15 classes) and Military Governmental (10 classes) Secondary Schools for boys in Damanhur, Egypt. Permission to conduct this study was officially obtained from the respective principal of each secondary school. Subjects were a convenient sample which included 350 male students enrolled at the third year in the mentioned settings. The minimum sample size of 320 was estimated using the epidemiological information statistical program. First, the secondary schools were selected according to the following criteria: being a governmental school, acceptance of the study protocol and location in the Damanhur district. Second, stratified random sampling was used inside each school. From a list of classes in each school, the researchers selected systemically and randomly 3 classes from 10 in the Military Secondary School and 5 from 15 classes in Omar Makram Secondary School. Within each class the researchers selected students in a random and systematic manner to attain the pre-calculated sample size of 350. Third, all students in the sampled classes who were present at the time of the study, consented after clarification of the study purpose, to fill self-administered questionnaire. Students were instructed not to provide their names on the study questionnaire in order to establish anonymity.

2.3 Tools

The Attitudes Towards Men in Nursing Scale (ATMINS), which was developed by Bartfay *et al.* in 2010,^[11] was used for data collection. It included questions about demographic data, followed by six statements with a Five Likert Scale to

measure nursing and non-nursing student attitudes and perceptions toward men in nursing where 1 represented strongly agree, 2 represented agree, 3 represented not sure, 4 represented disagree and 5 represented strongly disagree. The researchers added three open ended questions to explore the factors affecting the subjects' perceptions regarding men in nursing and prospective colleges among male students who enrolled in the science section. The study tool was adopted, modified and translated into the Arabic language. It was then passed through a language editing process. Also, seven independent and experienced personnel in nursing education and medical surgical nursing fields were employed to validate the tool. A pilot study was carried out on 17 male students from the aforementioned study's settings (11 from first school and 6 from the second one) which were excluded from the study sample, to test tool clarity, feasibility, time needed to fill and understanding of the subjects. The students completed the questionnaire sheet in the presence of the researcher who was there to explain any difficulties or vague items of the tool.

2.4 Statistical analysis

Data was fed, coded, edited and analyzed using the Statistical Package for Social Sciences (SPSS 16). Descriptive statistics were done using numbers and percentages. Then the chi-square and Z tests were used to test the significant difference between categorical variables and percentages, the selected level of significance was p -level < .05.

3. RESULTS

Table 1 clarifies that more than three quarters (77%) of male students were between 15-17 years old and almost all (90%) of them were Egyptian. More than one half of the study subjects (56.3%) were from urban areas. About two thirds of the subjects (66%) were from Omar Makram Secondary School and approximately the same percent of them (64.3%) were studying in the scientific section. Almost three quarters of the subjects (71.4%) conveyed their families' negative reaction toward nursing as a career choice.

Table 2 represents the data that answers the first research question. It is clear that there are positive perceptions among secondary schools male students regarding almost all scale items. The highest percentage among the study subjects was regarding the fourth item (87.7%) followed by the third item of the scale (83.43%) which indicates their positive views and agreement regarding "Mass media portrayal of male nurses as being effeminate in nature which discourages males to choose it as a career" and "Mass media portrayal of nursing to be more suited to women which discourages males to choose it as a career" while the majority of them (63.6%) reported disagreement and negative perception about their willingness to encourage a male family member to pursue nursing as a challenging and rewarding career choice. There is a clear and apparent statistically significant difference among students' responses within the scale items (p -value = .00).

Table 1. Percent distribution of secondary school male students according to their general characteristics

General characteristics		No. (n = 350)	%
Age	15-17	270	77.1
	18-20	50	14.3
	> 20	30	8.6
Nationality	Egyptian	315	90
	Other	35	10
Residence	Rural	113	32.3
	Urban	197	56.3
	Upper Egypt	40	11.4
Secondary school	Omar Makram	231	66
	Military	121	34
School study section	Scientific	225	64.3
	Literary	125	35.7
Family reaction toward male family member who wishing to enter nursing college	Positive	92	26.3
	Negative	250	71.4
	Neutral	8	2.3

According to the data in Table 3 that shows the perceived factors that may inhibit or encourage the views of study subjects concerning men in nursing, there is a clear and observed

statistically significant difference among students' responses within the scale items (p -value = .00) for all scale items. The greatest percentage (66% & 64.3%) of male students per-

ceived that “Gaining good income” and “Travelling abroad” (90%, 56.3% & 48.6%) showed that the noticeable factors are the apparent factors that tend to encourage better views about men in nursing according subjects’ reporting. Conversely, the highest percentages among all male students

that inhibit their perceptions regarding men in nursing are “Media description”, “No specific job title for men” and “No role model in nursing”.

Table 2. Distribution of secondary school male students according to their perceptions toward men in nursing

Scale items	Agree		Disagree		Chi square	p-value
	No.	%	No.	%		
Nursing is not a masculine career for males in Egyptian society.	211	60.3	89	25.43	181.4	.00
Female nurses are more caring & nurturing than males as perceived by Egyptian society.	189	54	113	32.29	128.1	.00
Mass media portrayal of nursing to be more suited to women which discourages males to choose it as a career.	292	83.4	32	9.14	593.1	.00
Mass media portrayal of male nurses as being gay or effeminate in nature which discourages males to choose it as a career.	307	87.7	17	4.86	699.1	.00
Nursing is more appropriate for females because they are caring and compassionate by their inborn nature.	233	66.6	95	27.14	270.2	.00
I would encourage a male family member to pursue nursing as a challenging and rewarding career choice.	72	20.6	223	63.71	49.8	.00

Note. Strongly agree + agree = agree; Strongly disagree + disagree = disagree; Neutral response is excluded

Table 3. Perceiving factors among secondary school male students that affect their attitude toward men in nursing as presented by percentages

Perceived factors *	For the better		For the worse		Z-Score	p-value
	No.	%	No.	%		
Public view of male nurse	40	11.4	8	2.3	4.786	.00
Family & friends opinion	89	25.43	15	4.28	7.864	.00
Media description	8	2.3	315	90	-23.276	.00
Effect of school teacher	110	31.43	13	3.71	9.633	.00
No specific job title for men	94	26.86	170	48.6	-5.927	.00
Internal appreciation for nursing as a helpful job	44	12.6	8	2.3	5.189	.00
No role model in nursing	37	10.6	197	56.3	-12.819	.00
Bad experience from nursing staff in hospital	40	11.4	15	4.285	3.512	.00
Gaining good income	231	66	8	2.3	17.775	.00
Travelling abroad	225	64.3	8	2.3	17.405	.00

* = Students were allowed to mention more than one factor

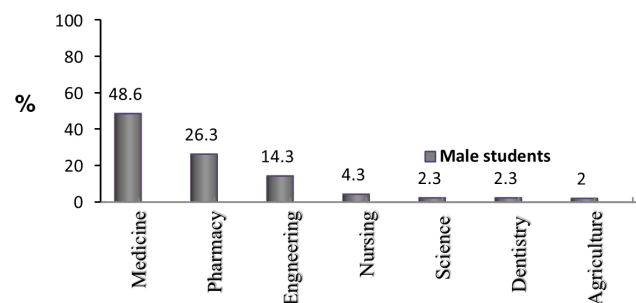


Figure 1. Ranking of secondary school male students for their selection of hoped prospective college after secondary certificate

For scientific section only n = 225 male students out of 350

For an extra investigation of the perceptions of secondary school male students, Figure 1 shows selection of their hoped prospective college after secondary school. The researchers put this option for students who enrolled in the scientific study section in the school and were allowed to select the nursing college after secondary school according to their studying branch or section (n = 225 male students only out of 350).

Concerning Figure 1, approximately one half of this group (48.6%) chose the Medicine College as the first college selection to join in the future, followed by Pharmacy (26.3%) and then Engineering (14.3%). The Nursing College (4.3%)

came in the fourth ranking with minimal percent of their selection.

4. DISCUSSION

The nursing profession has long experienced public typecast and been intimately connected with womanliness. The participants' demographic profile in the current study reflects the nature of life in Egypt among male students in secondary schools. It is clear that the majority of male students came from urban areas and was enrolled in the scientific sections. These adolescents grew up with a deep vision to join the work force as early as possible as an urgent source of revenue. Moreover, the nature of the life in Egyptian urban areas with high living cost tends to motivate them to carry responsibilities very early.^[2,8,13]

It was found that the most families expressed negative reactions when knowing that their sons will join nursing as a future career. This disposition shows the powerful impact of families on influencing sons' career desires. This finding is in-line with an earlier report by El-Sharkawy F *et al.*, in 1996 who demonstrated a significant correlation between the presence of family support and career choice. Moreover, Al Jarrah IA, in 2013 stressed that the family members had the upper hand in deciding various livelihoods, while others have shown that families were also the most supportive factors that affected college selections.^[14,15]

The present study demonstrated that most of the secondary school male students agreed that the mass media portrayal of a male nurse as being effeminate in nature, which discourage them to choose nursing it as a career. Gender stereotyping is common in the nursing field which undermines the potential development of men in nursing. Even so, mass media clarified that the contribution of men in nursing is negligible, but this can be due to the overriding manipulation of femininity in this career.^[4,8,16] Similarly, Price established that the students' pre-entry perceptions of nursing are affected by the stereotypical portrayal of nursing in the popular culture and the media. Contradictory to these views, in Egypt, Abdel El-Halem and co-authors in 2012 found that nursing as "men's work" was viewed by a high percentage of undergraduate male nursing students as suitable and masculine work, and this though is contradictory to the stereotypical image of nursing in society as female-leading work.^[3,8] The perception of male students in secondary schools should be highly appreciated since they are a part of society and may be nursing students in the future. It is obvious that their perception is strongly affected by mass media, and hence, this will affect the preference of nursing as a livelihood.

On the other hand, the majority of secondary school male

students have a negative perception about encouraging other family male members to pursue nursing as a challenging and rewarding career. They perceived that it is difficult to be appreciating nursing as a career for males. Therefore, they hadn't internalized motives regarding nursing as a job for themselves and others. However, they expressed and responded by the opposite view which represented their appreciation for the work of nurses or they stated their desire to become nurses. This contradiction clarified that the male students realized and understood the importance of being a nurse but they refused to become one or persuade others males too. There are some male school surveys about career desirability for nursing; male positive responses had lower percentages.^[3,12]

Congruent with researchers' views, Baddar F, in 2006 who discussed that the key factor to select nursing as a career is internally, in the students themselves. This reflected their consciousness by the value of the nursing role in the community. Additionally, self-identification and autonomous decision to follow nursing as a career should be internal motives to become a nurse.^[3,17] Therefore, internal persuasion plus external influence through family support are required for adolescents' males. Furthermore, the significant factor that may encourage males to enter nursing is the presence of a source of moral support such as a family member, who passed through nursing study and knows its great benefits in the future.^[4,10]

Hence, there are several factors that may give some justification for the opposite views of male students. For instance, Bartfay WJ, in 2010, clarified that the image of men in nursing suffered from multiple thoughts that hindered males in entering the nursing profession such as stereotyping, community stigmatizing of the image and poor media representation. Moreover, career choice studies for nursing have often explored many variables that affect the judgment to enter the nursing academy including family, culture, internal needs, motives, and knowledge.^[1,10,11]

According to the revealed data in the present study, there are highest percentages of secondary school male students who perceived some inhibiting factors toward men in nursing, such as "media description", "no specific job title for men" and "no role model in nursing". Parallel to these results, Twomey CJ, in 2008, mentioned that there are no admired, meaningful and impressive positive nursing models for young youth. While nursing entails empirical, personal, ethical and educational patterns that are appreciated among all other fields, this view still present.^[16,18] Furthermore, Williams CL., in 2004, mentioned that the mass media symbolized the male nurse with a poor description which is

contributing to create a negative societal portrayal for men in nursing.^[19,20] Moreover, the stereotyping of male nurses as oddities, gay, or effeminate influences parents to recognize negative images about nursing for their son's career. Thus, they reject the idea to support their sons to enter nursing college.^[21-23] Additionally, Shukri R, in 2005, reported that in the Arab world there is a negative community image about nurses that pessimistically effects nursing career choices, predominantly for men.^[22,24]

Alternatively, the majority of study subjects stated that other factors can improve their views about men in nursing, such as gaining good income and travelling abroad. Correspondingly, there are adequate verifications for this point of view. Nursing as a livelihood has several benefits especially for males such as the availability and access of work, both nationally and internationally. Nowadays nursing should be a striking job particularly for males, since it presents real work choices and constant employment with sensible salaries. Moreover, the graduates are employed immediately after graduation, and work abroad whether in Arab or western countries.^[8,18,25] But Gamel R, in 2006, in Egypt, discussed that accessibility of work and better wages were weak factors to encourage men to select a nursing university. Also, Al Jarrah IA, in 2013 found that a high proportion of associate nursing students perceived that the first and second reason for entering nursing institutes are secondary school grades and admission policies and not the benefits of nursing job salaries.^[15,26]

Finally, with reference to the male students who enrolled in the scientific section and were allowed to select scientific faculties that included nursing after secondary certification, a very minimal percent of them (4.2%) ranked the Nursing College in the fourth position of their selection. This ranking is compared with the Medicine College (48.6%). Equivalent to this finding in a similar study, Achilles K in 2010, found that the students who chose nursing as a career represented

only 10% of the study subjects and other major percents belonged to other colleges. As well, this finding is somehow comparable to a related study that was done by Dave in 2007 who found that only 3.9% of youth rated nursing as a first career priority.^[2,27] In another study in Jordan, Al Jarrah IA, in 2013, found that the mean ranking for the nursing profession among all professions is 2.98 among undergraduate students.^[15]

In summary, career choice studies in the nursing field have often sought to explore many variables that affect the decision of students to enter the nursing college and has generated multiple factors such as gender, family, culture, internal needs and motives, travelling abroad, immediate work, proper salaries, society view, media and prospect for desired college.

5. CONCLUSION AND RECOMMENDATIONS

Based on the results of this study, male students in the secondary grade seem to have a positive perception toward men in nursing but do not prefer it as a future career. Gaining good income and travelling abroad are apparent factors that may influence their point of views toward joining a nursing college. While, media description, no specific job title for men and no role model in nursing, are the greatest factors that inhibit the opinions of male students toward men in nursing. Almost half of the students chose to study medicine, but only a few selected to study nursing.

It should be emphasized that more investigations are required to improve the image of male nurses in the society and efforts should be taken to attract the young males in secondary schools to join nursing colleges. Moreover, nursing schools, media and public views should focus on nursing roles and reflected a positive image toward the nursing profession. It is also recommended to develop orientation and interview training programs regarding the career choice of the nursing profession for male students.

REFERENCES

- [1] Bartfay WJ, Bartfay E, Clow KA. Attitude and perceptions towards men in nursing. *Journal of Allied Health Sciences and Practice*. 2010; 8(2): 2-7.
- [2] Achilles K. Image of nursing profession as viewed by secondary school students in ilala district, Dar es Salaam. *The Dar-es-salaam Medical Students' Journal*. 2010; 12-18.
- [3] Price SL. The Experience of Choosing Nursing as a Career: Narratives from Millennial Nurses. Published PHD Theses, Lawrence S. Bloomberg Faculty of Nursing: University of Toronto; 2011. 1-46, 55-180.
- [4] Gaber M, Mostafa M. Comparison of Nursing Students' perceptions about Male Nursing among Zagazig University in Egypt and Shaqra University in Saudi Arabia. *Life Science Journal*. 2013; 10(4).
- [5] Zenger J, Folkman J. Are Women Better Leaders than Men? *Harvard Business Review*. 2012. Available from: <https://hbr.org/2012/03/a-study-in-leadership-women-do>
- [6] Zdemir A, Akansel N, Tunk G. Gender and Career: Female and Male Nursing Students' Perceptions of Male Nursing Role in Turkey. *Health Science Journal*. 2008; 2(3): 153-161.
- [7] Twomey CJ, Meadus JR. Despite the Barriers Men Nurses are satisfied with Career Choices: Memorial University of Newfoundland.

- Canadian Journal of Career Development/Revue Canadienne De Developpement De Carrier. 2008; 7(1).
- [8] Abdel El-Halem GE, El Hawashy ZI, Gamal El-Dein AA, *et al.* Undergraduate Male Nursing students' Perception about the Image of the Nursing Profession. *Journal of American Science*. 2012; 7(3): 614-23.
- [9] Mackintosh C. Caring: The socialization of pre-registration student nurses: A longitudinal qualitative descriptive study. *International Journal of Nursing Studies*. 2006; 43(8): 953-962. PMID: 16386255. <http://dx.doi.org/10.1016/j.ijnurstu.2005.11.006>
- [10] McLaughlin K, Moutray M, Moore C. Career motivation in nursing students and the perceived influence of significant others. *Journal of Advanced Nursing*. 2010; 66(2): 404-412. PMID: 20423423. <http://dx.doi.org/10.1111/j.1365-2648.2009.05147.x>
- [11] Maben J, Latter S, MacLeod Clark J. The sustainability of ideals, values and the nursing mandate: evidence from a longitudinal qualitative study. *Nursing Inquiry*. 2007; 14(2): 99-113. PMID: 17518822. <http://dx.doi.org/10.1111/j.1440-1800.2007.00357.x>
- [12] Erickson J, Holm L, Chelminiak L, *et al.* Why not nursing? *Nursing*. 2005; 35(7): 46-49. PMID: 15988219. <http://dx.doi.org/10.1097/00152193-200507000-00047>
- [13] Bigbee J, Mixon D. Recruitment and Retention of Rural Nursing Students: A Retrospective Study. *International electronic Journal of Rural and Remote Health Research, Education, Practice and Policy*. 2013; 1-10. Available from: <http://www.rrh.org.au>
- [14] El-Sharkawy F, El Hadad A. Factors affecting students' choice of nursing as a career in Egypt and Syria. *The New Egyptian Journal of Medicine*. 1996; 15(4): 435-440.
- [15] Al Jarrah IA. Associate nursing students' perceptions toward nursing profession in Jordan. *European Scientific Journal*. 2013; 9(6): 1857-7881.
- [16] Twomey CJ, Meadus JR. Despite the Barriers Men Nurses are satisfied with Career Choices: Memorial University of Newfoundland. *Canadian Journal of Career Development/Revue Canadienne De Developpement De Carrier*. 2008; 7(1).
- [17] Baddar F. The Image of Nursing as a Profession among Undergraduate nursing Students and Interns. Second international conference for Health, environment, and improvement-High Health Institute. 2006; 13-88. PMID: 17134524.
- [18] Chauke ME. Transforming student nurses' image of nursing: an appreciative inquiry approach. A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of literature and philosophy, University of South Africa; 2014. 1-38.
- [19] Williams CL. Looking forward A few Good Men. *Minority Nurse*. 2004; 22-8. PMID: 15789979.
- [20] Girard NJ. Men and nursing-editorial. *AORN Journal*. 2003; 1-3.
- [21] Davis MT, Bartfay WJ. Men in Nursing: An untapped Source. *Canadian Nurse*. 2001; 97(5): 14-8. PMID: 11865602.
- [22] Shukri R. Status of nursing in the Arab world. *Ethnicity & Disease*. 2005; 15(1): 88-89.
- [23] Kalisch J, Begeny S, Neumann S. The image of the nurse on the internet. *Nursing Outlook*. 2006; 55(4): 182-8. PMID: 17678683. <http://dx.doi.org/10.1016/j.outlook.2006.09.002>
- [24] Keogh B, O'Lynn C. Male nurses' experiences of gender barriers: Irish and American perspectives. *Nurse Educator*. 2007; 32(6): 256-9. PMID: 17998853. <http://dx.doi.org/10.1097/01.NNE.0000299478.64809.82>
- [25] Buerhaus P, Donelan C, Norman L, *et al.* Nursing students perceptions of a career in nursing and impact of a national campaign designed to attract people into the nursing profession. *Journal of Professional Nursing*. 2005; 21(2): 75-83. PMID: 15806504. <http://dx.doi.org/10.1016/j.profnurs.2005.02.001>
- [26] Gamel R. The image of nursing as a profession among undergraduate nursing students and interns. Unpublished Master Thesis, Faculty of Nursing: Alexandria University. 2006.
- [27] Dave HT. Attitude Towards Nursing Profession. *The Nursing Journal of India*; 2007; 98: 9.