

Clinical Training Health Education Barriers with Elderly: Nursing Students' Perspective

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Abstract

Background: Globally, the most recognized approach for avoidance and management of illness or any health problems is the health education. Nurses as health educators are necessitated to be equipped with fit health teaching skills, particularly, with elderly clients. Gerontological nurses are confronting many difficulties during conduction of health education process with elders. Consequently, the current descriptive explanatory study is established **Aim:** to investigate and determine clinical training health education barriers with elderly: nursing students' perspective **Research design:** A descriptive explanatory research design was used in the present study. **Settings:** at the gerontological nursing department, Faculty of nursing, South Valley University, Qena, Egypt. **Sample:** A convenient sample 238 nursing students who enrolled in Gerontological nursing department is including in the study sample. **Tools:** Health Education Barriers Questionnaire (HEBQ) was employed in data collection. **The results:** revealed that the nursing students perceived many barriers in themselves, elderly patients and their families, healthcare staff and clinical training area. Also, there is a statistical significance difference in between the perceived health education barriers in clinical training with elderly and nursing students' gender and their clinical training specialty. **Conclusion:** the majority of nursing students perceived multiple barriers related to themselves, elderly patients' characteristics, elderly patients and their families' un-cooperation and barriers in relation to the healthcare staff and clinical area **Recommendations:** the current study is to ensure collaboration and cooperation between all academic nursing departments and other academic and non-academic healthcare disciplines to determine and overcoming the health education barriers among nursing students with elderly and other types of patients. Likewise, a fit well designed plan for health education clinical training with elderly patients should be developed. **Further studies are mainly:** repetition of the study with elderly patients themselves to determine the barriers from their perspectives, and develop standard or policy for health education role in any health care facility.

Key words: health education barriers, nursing students, elderly patients, clinical training.

Introduction

The elderly people have many health problems due to ageing process, frequently, have many challenges and sufferings, particularly regarding their health. Therefore, the healthcare professionals and dominantly nurses are the first ones who share such sufferings with elders and at the same time help them to maintain good health as possible. The promotion and maintenance of elderly health became a national direction in many countries as Egypt. Consequently, the enhancement of self-care for older adults has grown and be a priority among health-staff. Health education is one effective tool to increase their healthcare literacy and then, self-care will be improved. Health education

is the cornerstone of elderly, which is considered a dynamic and progressive process; to meet the learning needs for both elderly patients and their families (Abd El Mohsen, 2009 Abudu-Birresborn et al., 2019).

Health education is a learning-teaching process designed to help patients, their families and communities to improve their health literacy level, by improving their knowledge, skills and attitudes or changing their behaviors positively. Health teaching is a crucial process in gerontological nursing, because it is not limited to teach elderly patients how to prevent the health risk, but, also, help them to have enough information about their chronic illness and how deal effectively with it. Health education can re-

shape the elderly patient's daily practices and habits to be healthy and positive lifestyles. Furthermore, health education with elderly should be designed well to overcome the difficulties that may face them to understand and apply the needed health information. It can be only a care for older adults and their accompanied chronic diseases (WHO, 2012; AlSenany & AlSaif, 2014; Gould et al., 2015).

Today, nursing students have a great role and observable effects with patients, mainly in gerontological nursing care. They can handle the health education activities effectively with elderly who may have some normal physiological changes like, poor vision, hearing or unbalanced movements. Nursing students may have enough time and scientific knowledge or communication skills to deal successfully with elderly. They are almost learning to ensure health promotion, maintenance, restoration, changing, encouraging, and modifying elderly patient's behaviors to healthy ones. Nursing students are aware by the value of health education which is an important course that taught in their curricula. They recognize that health education is a science that focuses on the developing patients' intellectual capabilities, health decision making, proper self-care practices and respect of values in dealing with health and illness (Koskinen et al., 2012; Mattos et al., 2015; Koskinen et al., 2016).

Although, nursing students approved a competency in health education provision, still, there is an observed discrepancy between their ideal role in academic study and their clinical role in reality with patients, particularly, with elderly patients. In clinical practice, the health education activities need a lot of preparations, starting from planning, implementation and evaluation with patients. Setting objectives, selection and organization of health teaching content, selection and organization of teaching

strategies that fit content and elderly, selection and organization of audiovisuals, and designing the evaluation methodology for identification patient's feedback, all are important planning activities for health education process that followed by actually implementation and evaluation steps of health education practice. However, there is a gap between studying and practicing of such activities due to several reasons that can be strong barriers to reach the desired and the valuable outcomes from health education benefits, predominantly with elderly patients (Goudreau et al., 2015; Koskinen et al., 2015).

The health education barriers with elderly patients during nursing student's clinical training can be: related patients themselves and their families (like wrong beliefs, poor vision or hearing, un cooperation and mistrust), student's themselves (lack of skills and confidence), training environment and organization (lack of place and limited facilities and resources or policies regarding health education practice), time barriers (workload and no specific time for health education), and health education messages barriers (jargons and sensitive issues or non-valid content) (Hwang et al., 2013; Ghorbani et al., 2014; Forbes et al., 2016; Mackey & Bassendowski, 2017) Determination of health education barriers, principally, is a valuable issue with elderly. Also, for nursing students or nursing workforce it is a crucial issue to precisely identification of such barriers and dealing with it to improve the health education practice in training or in nursing actual performance. It can help to propose strategies to overcome those barriers and being an exceptional step in gerontological nursing and health education fields as a whole.

Significance of the study

Health education barriers become a challenge for students' nurses who should

ensure that the elderly patient make informed health decisions based on the necessary needed information. Health education barriers in clinical training with elderly among nursing students may prevent delivery and transfer of needed health messages in the frame of patients' culture, language, literacy, and physiological status. On the other hand, such barriers should be resolved by the nursing students who still have limited clinical experience with elderly patients and clinical training environments. Therefore, it is important to assess and determine such barriers to overcome such barriers for the benefits of; nursing students and elderly patients, plus health education practice generally (Liu et al., 2015; Rathnayake et al., 2016). Evaluate the nursing students' health education experience with elderly in clinical training would be a beneficial step to look for their clinical training impact from their' eyes and opinions, then, tailoring such training to be fit their needs and preferences. Therefore,

Aim of the study

The current study is aiming to investigate and determine clinical training health education barriers with elderly: nursing students' perspective.

Research question: What are the clinical training health education barriers with elderly facing nursing students at different clinical settings?

Materials and Method

Materials:

Research design:

A descriptive explanatory research design was used in the present study

Setting: at South Valley University, Faculty of nursing, and in the nursing student's clinical training areas of the outpatient clinics (medical clinic, diabetic clinic, and cardiology clinic) in the Main South Valley University Hospital in Qena city, Egypt.

Subjects: convenient sample was nursing students who enrolled in fourth year, academic year 2018-2019 second semester, at Gerontological nursing department,

Sample size: composed 238 from 246, accept to participate, and complete filling of the study tool.

Tools of the study: The tool of data collection was Health Education Barriers questionnaire (HEBQ) that was developed by Abd El Mohsen in 2009, it was to assess the health education barriers that facing nursing students during their clinical training in medical-surgical nursing. It was modified by the researchers to fit the study aim with elderly patients.

Scoring system

This tool involved two parts: personnel and sociodemographic data (age, academic year, gender, marital status, and place of residence, clinical training area), and health education barriers during clinical training with elderly, in terms of 30 multiple choice questions: 1- barriers related to the nursing students themselves in conduction of health education process (9 questions), 2- barriers related to elderly patients and their families (12 questions), 3- barriers related to nursing staff and the hospital as a clinical training area (6 questions), and 4- barriers related to health messages that provided during health education process (3 questions). Four open ended questions, it was calculated by the number of responses to provide one theme and then construct a statement that represents subjects' point of views. The total score of tool is 156, and the scoring system presented as follow in a percentage (less than 30% have minimal barriers), (30% - 60% have moderate barriers) and (60%-100% have a lot of barriers).

Method:**Administrative Process**

- Approval of responsible authorities was obtained through official letters from the Faculty of Nursing.
- Meetings were held with the directors of the selected settings to explain the purpose of the study and gain their cooperation during data collection.

Content validity and reliability

The study tool was adapted by the researchers and checked for validity by submitting it to a jury committee that consisted of five of specialist in the related fields (nursing education, Gerontological nursing and Geriatric medicine). Reliability was measured using the Cronbach Alpha Reliability Test which revealed accepted value ($7 \geq 1$).

Pilot Study

A pilot study was established on 10% of the study sample that was about fourteen nursing students who were selected by systematic random sampling technique from first semester 2018-2019, at the same mentioned settings. The study tool clearness, practicability, filling time, and feasibility were ensured and all necessary changes were done.

Data Collection

Nursing students were asked to complete a self-reporting in the presence of the researchers. The students were taken enough time to understand the questions and think carefully, then, respond to each question. Data was collected from February to April 2018/2019.

Ethical considerations were ensured; Authorized permission to conduct this study was attained from the mentioned study settings. Written informed consents were taken from the study subjects after detailed explanation of the study purpose and methodology. Confidentiality and

anonymity were ensured. Nursing students were ascertained that their evaluation grades will be never affected by the study and they have full freedom to withdraw from the study at any time they want.

Statistical Analysis:

Data were entering to the computer and analyzed using IBM SPSS software package version 20.0. Frequency, percentages, mean, and standard deviation were used for describing and summarizing quantitative and qualitative data. T test and P significance difference, F-test (ANOVA) and Pearson coefficient test were used for analytical statistics. Significance of the obtained results was judged at the 5% level.

Results:**Subjects' Sociodemographic data**

Table (1) clarifies the percentages distribution of the nursing students according their Sociodemographic data. According to age of nursing students 83.2% were in early twenties and about two thirds 70.6% were females. More than half of the nursing students 54.0% were single and about the same percent 45.8% were come from Upper Egypt residence. Almost all of the nursing students 49.6% and 44.5% were enrolled in diabetic and chest clinics in their gerontology clinical training. More than one third of them 37% have grade percentage from 60 to 70 in the previous year. Finally, almost all of them 93.3% like to practice health education with elderly.

Subjects' perceived barriers in themselves:

- During conduction of health education process (assessment, planning, implementation, evaluation and documentation) with elderly in clinical training.

Pertaining to table 2, that represents the distribution of the subjects in relation their

perceived barriers in themselves during conduction of health education process with elderly. For health education assessment: approximately three quarters of them 70.59% reported that didn't know anything about health education assessment with elders. For health education planning and implementing: approximately all of nursing students 83.2% mentioned that they didn't know anything about health education planning and implementation with older adults. Additionally, as regards evaluation and documentation of health education: almost all of them 90.33% perceived that they didn't know anything about health education evaluation and documentation with elderly.

Subjects' perceived barriers related to elderly patients and their families:

Respecting the data in table 3, that shows the nursing students perceived barriers regarding elderly patients and their families. The majority of them 84.87% mentioned that they can interpret elderly patient's factors that affect negatively health education. The most apparent factors were perceived as regards elderly patients were: patient's level of education 63.03%, Health beliefs & thoughts 70, 59%, and health education past experience 74.79%. About two thirds of them 59.66% mentioned that elderly patients and their families never cooperate in health education. Exact one half of subjects 49.57% found that elderly patients and their families never put a trust in nurse's health information. But, more than one half 55.04% of nursing students reported that they perceived that always elderly patients and their families accept health education from nurses. As regards the overall of the most barriers related to elderly patients and their families that were perceived by the study subjects, almost all of nursing students 90.34% found that lack of patient physical comfort is an apparent one, and about two thirds 60.92% of them

mentioned that lack of patient senses (vision and hearing) is mostly interrupt the health education process.

Subjects' perceived barriers related to healthcare team and training area:

Regarding to the nursing student's perceptions to the health education barriers related to healthcare team and training area, the majority of them found that there is no specific nursing duty for health education into the hospital, the routine of overload of nursing work, there is no suitable places for conduction of patient education, and there is no facilities & resources for conduction of health education, by the following ranks respectively 93.28%, 88.24%, 70.59%, and 66.37%.

Correlation between nursing students' perceived health education barriers and their gender during clinical training with elderly.

As regards table 5, it demonstrates the correlation between nursing students' perceived health education barriers and their gender during clinical training with elderly. It is clear that there was statistical significance difference between male and female nursing students in relation to all perceived health education barriers during clinical training with elderly, in favor of male students who have a big mean. $T = 6.46$ & $P = 0.001$ for the perceived barriers in themselves as health educators. $T = 2.42$ & $P = 0.016$ for the perceived barriers in relation to patients and their families. And, $T = 8.769$ & $P = 0.001$ for the perceived barriers in healthcare team and clinical training area. Gender is considering a great variable that affect seriously on nursing student's perceptions toward the problems or barratries that are facing them during clinical training with elderly, particularly in relation to male nursing students.

Correlation between nursing students' perceived health education barriers with elderly and their clinical training specialty.

According to the data in table (6), it clarifies the correlation between nursing students' perceived health education barriers with elderly and their clinical training specialty. It was noticed that there was a strong statistical significance difference between the students' perceived barriers and

their clinical training specialties. For both the perceived barriers in students themselves and patients and their families, the significance was in favor to students who were in cardiology clinic with the largest mean; $F= 341.43$ & 213.45 and $P < 0.001$. While, as regarding the perceived barriers in healthcare team and training area, the significance was in favor to students who were in medical clinic with the major mean; $F= 41.606$ and $P < 0.001$

Table (1): Distribution of the study subjects according to their sociodemographic data (n = 238)

Sociodemographic data	Total (n= 238)	
	No	%
Age		
20 -	198	83.2
23 -	28	11.8
26 ≤ 28	12	5.0
Mean ± SD.	21.64 ± 1.79	
Sex		
Female	168	70.6
Male	70	29.4
Marital status		
Single	129	54.0
Married	107	45.0
Divorced	2	1.0
Residence		
Urban	49	20.6
Rural	80	33.6
Upper Egypt	109	45.8
Clinical training unit		
Medical clinic,	118	49.6
Diabetic clinic,	106	44.5
Cardiology clinic	14	0.8
Previous year grades percentage		
60 ≤ 70	88	37
71 ≤ 80	55	23.1
81 ≤ 90	53	22.3
91 ≤ 100	42	17.6
Did you like to practice health education with elderly		
Yes	222	93.3
No	16	6.7

Table (2): Distribution of the nursing students according to their perceived barriers in themselves during conduction of health education process with elderly (n = 238)

Nursing students' perceived barriers in themselves during health education process with elderly.	Total (n= 238)	
	No.	%
*The most perceived barriers in health education assessment with elderly patients		
Didn't know anything about health education assessment	168	70.59
Didn't know the sources or methods of data collection	70	29.41
Lack of experience in writing knowledge deficit diagnosis	80	33.61
Didn't interpretate elderly patients' needs for knowledge	109	45.8
All of the above	55	23.1
Have no barriers	16	6.72
*The most perceived barriers in planning and implementing of health education with elderly patients:		
Didn't know anything about health education planning and implementation	198	83.2
Lack of knowledge about educational objectives	109	45.8
Difficult language of health related content	16	6.72
Lack of knowledge about teaching strategies	118	49.57
Lack of knowledge about audiovisual preparation	70	29.41
Lack of reference	2	0.840
Lack of time to preparing the teaching plan	88	36.97
Lack in communication skills	55	23.11
All of the above	53	22.26
Have no barriers	55	23.11
*The most perceived barriers in evaluation and documentation of health education with elderly patients:		
Didn't know anything about health education evaluation and documentation	215	90.33
Lack of knowledge about health education evaluation process and tools	100	42.01
Lack of knowledge about health education documentation	155	65.13
Lack of time to evaluate or document the health education with elderly	116	48.74
Lack of guidance and directions from instructors	92	38.65
All of the above	100	42.01
Have no barriers	12	5.04

*: Total items not mutually exclusive

Table (3): Distribution of the nursing students according to their perceived health education barriers related to elderly patients and their families (n = 238)

Nursing students' perceived barriers related to elderly patients and their families.	Total (n= 238)	
	No.	%
Interpretating elderly patient's factors that affect negatively health education		
Yes	202	84.87
No	36	15.13
*Elderly patient's factors that affect negatively health education		
Patients Language	16	6.723
Age	107	44.96
Sex	109	45.8
Patients occupation	88	36.98
Social status	118	49.58
Level of education	150	63.03
Health beliefs & thoughts	168	70.59
Psychological status	88	36.97
Marital status	55	23.11
Income	53	22.27
Religion	42	17.65
Residence	115	48.32
Past experience	178	74.79
Length of hospitalization	105	44.12
All above	100	42.02
Elderly patients and their families cooperate in health education:		
Always	10	4.20
Sometimes	35	14.71
Rarely	51	21.43
Never	142	59.66
Elderly patients and their families put a trust in nurse's health information:		
Always	70	29.41
Sometimes	2	0.840
Rarely	88	36.97
Never	118	49.57
Elderly patients and their families accept health education from nurses:		
Always	131	55.04
Sometimes	34	14.29
Rarely	28	11.76
Never	45	18.91
*The most perceived barriers related to elderly patients and their families:		
Lack of patient time	53	22.27
Lack of patient senses (vision and hearing)	145	60.92
Lack of patient physical comfort	215	90.34
Lack of patient psychological comfort	108	45.38
Elderly patients' disease process	105	44.12
Elderly patients' family member interruption	116	48.74
All of the above	92	38.66
Have no barriers	110	46.22

*: Total items not mutually exclusive

Table (4): Distribution of the nursing students according to their perceived health education barriers related to healthcare team and training area (n = 238)

Nursing students' perceived barriers related to healthcare team and training area.	Total (n= 238)	
	No.	%
Interpretating healthcare team and training area' negative factors that affect health education		
Yes	102	42.86
No	136	57.14
Cooperation of from healthcare team:		
Always	177	74.37
Sometimes	34	14.29
Rarely	12	5.04
Never	15	6.30
Presence of a suitable place for conducting patient education in clinical area:		
Always	5	2.11
Sometimes	48	20.17
Rarely	10	4.20
Never	175	73.53
Policies of the clinical area considered barriers of health education:		
Always	10	4.20
Sometimes	32	13.45
Rarely	68	28.57
Never	128	53.78
*The most common barriers related to healthcare team and training area:		
The routine of overload of nursing work	222	93.28
No specific nursing duty for health education into the hospital	210	88.24
No suitable places for conduction of patient education	168	70.59
No facilities & resources for conduction of health education	158	66.37
Careless attention for health education itself	46	19.33
Lacking of staff time	67	28.15
Un cooperation of health staff	33	13.87
Al of the above	67	28.15
Have no barriers	17	7.14

*: Total items not mutually exclusive

Table (5): Distribution of the nursing students according to their perceived health education barriers in relation to their sex as presented by mean and standard deviation

Nursing students perceived health education barriers	Female (n=168)		Male (n=70)		T test	P value
	Mean	SD	Mean	SD		
Health education barriers related to nursing students themselves	2.38	0.55	3.15	1.29	T = 6.467*	P=0.001*
Health education barriers related to elderly patients & their families	6.43	1.24	6.91	2.01	T = 2.426*	P=0.016*
Health education barriers related to healthcare team & setting	5.22	1.04	6.69	1.46	T = 8.769*	P=0.001*

T = T test * = Significant relation at P level ≤ 0.05

Table (6): Distribution of the nursing students according to their perceived health education barriers with elderly and their clinical training area specialty as presented by mean and standard deviation

Nursing students perceived health education barriers	Medical clinic (n=118)		Diabetic clinic (n=106)		Cardiology clinic (n=14)		ANOVA test	P value
	Mean	SD	Mean	SD	Mean	SD		
Health education barriers related to nursing students themselves	21.6	2.7	13.4	2.0	23.1	3.4	F = 341.43*	P < 0.001*
Health education barriers related to elderly patients and their families	23.7	3.9	15.7	3.4	32.0	1.6	F = 213.45*	P < 0.001*
Health education barriers related to healthcare team & clinical area	26.0	8.2	18.5	5.8	13.5	5.9	F = 41.606*	P < 0.001*

F = One way ANOVA test * = Significant relation at P level < 0.05

Discussion

Healthcare professionals' health education with elders needs adherence with certain considerations and restricted compliance to health education process. Health education can be only, the management of their complaints and suffering. It can solve many of their health problems, but, if it is provided in a standardized manner with systematically methodology and with proper utilization and fit follow up of the elderly patients. Elders' healthcare cost can be decreased and their seeking for healthcare services can be limited, if they follow well the health education instruction (Fathi & Abdelaziz,

2015; Kim, 2019).

Nursing students, as health educators, are facing a lot of challenges and problems, particularly, during health education clinical training with elderly. They still, have limited skills, knowledge, and competencies. Future, the elderly patients have certain difficulties in communication and dealing in general (Burnes et al., 2019). However, and according to the National Academic Reference Standards (NAQAAE, 2017), the nursing students should have proper communication competencies in conducting health education based on the patients' needs/problems surrounded by a clinical framework and at any healthcare facilities.

Therefore, the nurse educators have to determine any health education barriers that may face the nursing students in their clinical training, predominantly, with special group such as; elderly. Then, the nurse educators can remove and overcome these barriers and improve nursing students' health education competencies (**El-Demerdash et al., 2014; National Authority for Quality Assurance and Accreditation of Education [NAQAAE], 2017**).

The present findings approve that the majority of study subjects suffered from that they didn't know anything about health education assessment, planning and implementation, and additionally, health education evaluation and documentation during clinical training with elderly. These results are expected and consistent with many studies. Health education is frequently ignored by healthcare professionals, even, in academic work with nursing or medical students. This point is supported by Abd El Mohsen 2009, who stressed that there is a lacking of well-defined role expectations and job descriptions in health education among nurses. He added that the nursing students repeatedly, have a deficiency of knowledge, skills to provide effective health teaching. Similarly **Jamshidi et al. (2016)** found that nurses faced many barriers in using specific process or standards in preparing health education or implementing certain teaching strategies. Additionally, their language and communication skills with elderly were insufficient to send clear and understood message to elderly patients. Nurses almost complained that there is no time, or experience for fit health education for elderly. Furthermore, poor educational training of nursing students as regards the health education process, this may be leads to deprived quality of professional practice in patient education.

In contrast to these results, **Fathi and**

Abdelaziz (2015), discussed that, the nurses has the upper hand to send clear and effective health messages with fit strategies and well organized health education activities, also, **El-Demerdash et al. (2014) and McGilton et al. (2018)**, reported that the health education role is the most significant role in the nursing care plan. Nursing students should be well prepared for such role with fit language, communication and pedagogical preparations. Elderly needs clear, accurate concise and simple health information which should be planned efficiently by the nursing students. Health education course should be integrated and evaluated well in nursing curricula. Health education activity is the core element of nursing students' traits as recommended by National Authority for **Quality Assurance and Accreditation of Education, 2017**.

Another important barrier that were perceived by the majority of nursing students in the current study, were in relation to elderly patients' characteristics like; patient's level of education, health beliefs & thoughts, and health education past experience. Also, big proportion of nursing students mentioned that elderly patients and their families' un-cooperation, this may be due to the lack of trust in nurse information, lack of elderly patients' physical comfort and common senses as hearing and vision. These finding were discussed in multiple studies. In the same line with such results, **Huang (2013) and Faronbi et al. (2017)** concluded that elder patients and their families refuse or have limited contribution in health education process due to that they have some limited educational level, physical and physiological that may affect negatively on their health education comprehension. According to the aging process, older patient may found difficulty to follow the health literacy information and implement it with health problems. Limited vision, difficulty listening and poor peripheral sensation may be hinders to be actively engaged in health

education activities. Likewise, **Chesser et al. (2016)** in their review, mentioned that older adults may become 20% of the total population by 2030. They need especial tools for health assessment or health teaching to be adept in health literacy skills. Mainly, limited education, negative health education situations, the age-related alterations lead to limited understanding and participation in following health education instruction. They have diminishing in intellectual, visual and motor or sensory abilities that reflected unconstructively in their health literacy level. Therefore, older adult's patients and their families, frequently been un-cooperated, unaccepted and reject the health messages form healthcare staff or nurses. As well, **Kececi and Bulduk (2012)** highlighted that the geriatric healthcare professionals should investigate some difficulties with older adults that hinder them to receive or conduct health teaching. Such as: sarcopenia, cognitive deterioration and dysphagia as significant factors included in aging related changes.

But, and contradictory to these points, **McGilton et al. (2018)**, stressed that, the elderly patients and their families or their care-givers have intense needs for health literacy to manage: self-care requirements, insight to multi-drugs effects, physical and psychological limitations and frequent complications of the chronic diseases. Moreover, the older adults must receive competent health teaching with some considerations to their physical, psychological and sociocultural changes and their effect on learning capacity and efficiency. Elderly have many educational needs like; lifestyle promotion, strategies to improve lifespan, exercise, nutrition and immunization, as well as, expert counseling support for them and their families in relation to autonomous healthcare decisions and online health literacy.

Regarding to the nursing student's perceptions to the health education barriers related to healthcare team and training area,

the majority of them found that: there is no specific nursing duty for health education into the hospital, the overload of nursing work, no suitable places for conduction of patient education, and there are no facilities & resources for conduction of health education. These barriers may reflect a huge burden of work for nurses with limited role identification, also may be due to the lacking of authorities support to health education activities. Parallel to these discussions, **Che et al. (2016)** reported that there are limited rules or standards to be guide nurses in health education activities in the hospital. Nurses faced several pressures such as: huge workload; frequently patient's turnover; not finding suitable environment for health teaching, difficulty and work interruption in sharing messages in hospital areas, and unsettled confidence and work regularity. Furthermore, they found that the nurses not find health education materials or a room like a class to be fit to health teaching. In addition, in Egypt, **El-Demerdash et al. (2014)** and **Fathi and Abdelaziz (2015)** highlighted that, mainly, the nursing students found a lot of difficulties in the healthcare workforce and the hospital to conduct health teaching. They stressed that the learning climate and suitability of the teaching residence are lacked in the hospital. Egypt complains from a significant lacking in nurses as 276 nurses for every 100,000 people. Therefore, nurses confronted a huge pressure of work demands. Likewise, the atmosphere in the hospital is full of disturbances, crowdedness and noise.

Inconsistent to this line of speech, hospitals and its authorities are obligated to offer suitable and prepared learning environment for health teaching in hospitals with enough, available and fit instructional aids and facilities. All nursing and non-nursing staff should cooperate to overcoming any difficulties in the hospital or in the staff regarding implementing of health education process. Similarly, the

nursing educators should find new strategies and methods to remove any barriers that may face the nurse students in health education clinical training, mainly with elderly. Elderly patients need certain preparations for environments to avoid falling during moving or exercises. They also, need quite area for learning to enhance their understanding and concentration. Family and caregivers should participate to overcome any difficulties may confront elderly health literacy. Evidences recommended that nurse managers, nurse educators and stakeholders have to recognize these difficulties well and prepare standards, job description and policies regarding health education process in the hospital, mainly with a special group like elderly patients (Rhodes, 2012; WHO, 2012; Hussein & Hussein, 2013; Park, 2017).

Pertaining to the correlation results, the current study approved that there is a statistical significance difference in the nursing student's perceived health education barriers in clinical training with elderly and their sex or training specialty. Of course, the gender and nature of disease or training specialty among nursing students have apparent effects on their perception to the clinical training problems and how they deal with it. Matching with this point, Deasey et al. (2014), and Mansouri Arani et al. (2017) discussed that the stereotyping female dominant job like nursing, obligates many variations between male and female work style. Communication, physical activities, decisions, thinking, leadership abilities and difficulties responses, all are varied between male and female nurses who put a gender as a great variable to affect their perception to work needs and barriers. Huang (2013), Algozo et al. (2016) and Gustafsson et al. (2015) highlighted that the elderly responses to care and health education, also varied if the nurse is male or female. Mostly, many older adults prefer female nurse in care and

in providing health information. Likewise, the nature of elderly disease and health problems has a great influence on the number and components of their leaning needs. Therefore, nursing students' gender and their specialty of clinical training are considered an observed factors affecting their perception toward the barriers in health education with elders.

Conclusion

Health education in academic Gerontological nursing department is a major specialty in nursing sciences to be handled well by nursing students. Most of older adult health problems can be managed easily by health literacy of the patient. Therefore, all barriers may confront the nursing students during their health education clinical training with elder patients should be determined and then, can be resolved easily. The current study reveals that, the majority of nursing students perceived multiple barriers related to themselves; such as lacking knowledge and skills in conduction of healthy education process, including assessment, planning, implementation, evaluation and documentation. As well, the most of them found that elderly patients' characteristics like; patient's level of education, health beliefs & thoughts, and health education past experience are considered significant factors affecting elderly health education negatively. Moreover, elderly patients and their families' un-cooperation, lack of their trust in nurse information, lack of elderly patients' physical comfort and common senses as hearing and vision are other problems in health education clinical training with elderly. Additionally, the students found some barriers in relation to the healthcare staff and clinical area, such as, there is no specific nursing duty for health education into the hospital, the overload of nursing work, no suitable places for conduction of patient education, and there

are no facilities & resources for conduction of health education. These barriers were statistically significantly correlated with nursing students gender and the nature of clinical training specialty.

Recommendations and further studies:

Nursing students as health educators should be competent to send effective health messages with patient, family and society, mainly, with elder patients who have special learning needs with some unique health alterations. Collaboration and cooperation between all academic nursing departments and other academic and non-academic healthcare disciplines is an urgent issue to determine and overcoming the health education barriers among nursing students with elderly and other types of patients. Likewise, a fit well designed plan for health education clinical training with elderly patients should be developed. The current study put an insight for the following further studies:

- Repetition of the present study with elderly patients themselves to determine the barriers from their perspectives.
- Develop standard or policy for health education role in any health care facility.
- Develop a fit academic plan for health education clinical training with elderly patients, to help the gerontological nurse educators managing any difficulties with nursing students.
- Survey for all nursing students clinical training areas in Qena to determine the resources and facilities for effective health education among elderly patients.

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