

## Original Research Article

# Satisfaction to healthcare among elderly; comparison study between Egypt and Saudi Arabia

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**Received:** 25 May 2018

**Revised:** 02 July 2018

**Accepted:** 03 July 2018

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## ABSTRACT

**Background:** In the context of health care services; clinicians use consumer or patient satisfaction assessment to monitor their performance and alter the delivery of care in order to retain and attract customers. Also to determine how they can better meet the needs of patients and, so, improve patient compliance. This study was designed to examine the satisfaction status of elderly patients utilize the selected geriatric health centers in the study in a comparison way between Egypt and Saudi Arabia in order to improve the geriatric health care program in Egypt.

**Methods:** This is a cross-sectional study to assess the geriatric service through assessing the structure, process and geriatric satisfaction from the geriatric health services by an observational checklist and questionnaire. Statistical analysis was done using SPSS version 22 and Spectrum-5 software.

**Results:** Saudi Arabia centers were significantly higher in patients' satisfaction; there were a statistically significant difference between both countries regarding total satisfaction score ( $p < 0.001$ ).

**Conclusions:** The indicators in both countries under the study suggest a growing proportion of older people in the populations. This study has revealed that efforts to improve health care service for older people have not been fully implemented. Many older people still do not satisfy the offered medical service due to several obstacles. Policymakers must invest in the systems that would encourage and facilitate formal care provision, through partnership between the state and civil society for example and through investing in both old age and family support policies.

**Keywords:** Geriatric health, Geriatric's satisfaction, Comparative assessment

## INTRODUCTION

One of the main features of the world population over the last few decades has been rapid increase in the absolute and relative numbers of older people in both developing and developed countries. This trend will accelerate over the next two or three decades. Currently, about 60% of older persons live in the developing world. This number is expected to increase to 75% (843 million) by the year 2025.<sup>1</sup> For the Egyptian population over the last few

decades there was gradual increase in the numbers of older people. This trend will continue over the next decades. The percent of older people" defined as 60 years of age and more" was 6.1% of the total population according to the Egyptian census in 1996.<sup>2</sup> The percentage of older people reach 6.7% (male 2,888,193/female 2,973,531), and the expected percentage of older people may reach 8.9% in 2016 and 10.9% in 2026. Accordingly, the expected rate of total population from 1996 to 2026 is about 57% while the expected rate of

increase among older people during the same period is about 79%.<sup>3</sup>

The proportion of the elderly is increasing rapidly in Egypt. This comes up with health problems like hypertension, diabetes, cancers among others. Which can be delayed if good health care is accessed, whether the healthcare is prepared to take care of the elderly has not been extensively investigated. Sixty three per cent of older people find it hard to access healthcare when they need it.<sup>4</sup>

The ministry of health and population in Egypt is also starting a project to renovate and create geriatric health care centers in Egypt. These health services include daycare hospital establishment, training of the primary care physicians by academic staff in geriatric medicine at their work or in the academic units.<sup>5</sup>

Patient satisfaction has become increasingly popular, as a critical component in the measurement of quality of care. Satisfaction is one of the care outcomes for healthcare. Satisfaction with health care is measure with a long history in the social science. Nursing service is one of the most important components of hospital service. Understanding how things are looking through the patient's eye should be central part of quality improvement. The level of patient satisfaction with nursing care is an important indicator of quality of care provided in hospitals.<sup>6</sup>

The health services received by the elderly in Egypt today are part of the standard services provided for the all life cohort, without strategic attention to geriatric health requirements including physical, social and emotional needs. This study aimed to examine patients' satisfaction in To examine the satisfaction status of elderly patients utilize the selected geriatric health centers in the study in a comparison way between Egypt and Saudi Arabia in order to improve the geriatric health care program in Egypt. The information generated will be useful to health research and development initiatives relating to geriatric health. These include the following: establishment of geriatric services in primary health care facilities, awareness creation, training and capacity building in geriatric health and formulation of a national health policy for the elderly.

## METHODS

### *Study design*

Cross sectional analytical study design to assess the geriatric service through assessing the geriatric satisfaction from the geriatric health services. The study was conducted at four centers, two in Egypt (Hoda Talaat Harb specialist center for treatment and rehabilitation of elderly (Helwan) and Ganzour Center). And two centers in Saudi Arabia (Hamra PHC and Balad PHC).

### *Study duration*

The study was conducted in the period between (September 2016) and (end of May 2017).

### *Sampling technique*

Multistage random technique was applied; from the 27 governorates of Egypt, one governorate was selected randomly which was (Cairo) and from the 118 governorates of Saudi Arabia, one governorate was selected randomly which was (Jeddah). Then from the selected Egyptian governorate (Cairo) the facilities were divided into governmental centers and private centers, then two centers were selected randomly from governmental centers, Ganzour Center and Hoda Talaat Harb specialist center for treatment and rehabilitation of elderly (Helwan). From the selected Saudi Arabia governorate (Jeddah), the facilities were divided into governmental centers and private centers, two governmental centers were selected randomly from governmental centers, Al Hamra PHC and Al Balad PHC.

### *Sampling size*

Total population of Egypt in January 2016 is 90,086,267, while percent of geriatrics is 6.9%, so total number of geriatrics (age more than 60 years) is 6,215,953. Percent of population in Cairo is 10.5% of total population (9,440,374) and geriatrics are 651,386. Total population of Saudi Arabia in January 2016 is 31,521,418, while total number of geriatrics (age more than 60 years) is 923,577. Percent of population in Jeddah is 7.3% of total population (2,301,063) and geriatrics are 67,421.<sup>7</sup>

Number of geriatrics was determining by using sample size calculator (calculator.net), Confidence Level 95%, Confidence Interval 5%:

### *Population size in Cairo*

651,386, we need to measure 384 or more.

### *Population size in Saudi Arabia*

67,421 we need to measure 385 or more. So for easy calculation, 800 geriatric will be included in the study, as 200 geriatric in each center.

### *Data collection tool: Questionnaire for assessment of patients' satisfaction about geriatric health service*

The questionnaire directed to the patients was designed in Arabic and consisted of closed-ended questions that collected; Socio-demographic data (gender & age) and data about patients' satisfaction. A modified questionnaire was prepared by investigator from the (Application satisfaction measurement form) by ministry of health in Saudi Arabia with the exception of questions measuring satisfaction with internal departments. The questionnaire

measured four domains of satisfaction: Patient satisfaction of the healthcare givers (doctors & nurses), patient satisfaction of the availability of services, patient satisfaction of patients' rights and patient satisfaction of the cleanliness). Each question was of four points rating scale (3=Very Good, 2=Good, 1=Poor and 0=Non-Abdicable). For each satisfaction domain the percentage of satisfaction was calculated and divided into three levels of satisfaction: (High satisfaction:  $\geq 67\%$ , Moderate satisfaction 33-66% and Low satisfaction  $\leq 33\%$ ).

### Statistical analysis

The collected data were coded then entered and analyzed using the SPSS version 22 (Statistical package for social

science). Descriptive statistics for the socio-demographic characteristics of Participants, and survey items of the satisfaction questionnaire were analyzed by frequency and percentage for qualitative variables and (mean $\pm$ SD) for quantitative variables. Suitable statistical tests were used. P-values equal to or less than 0.05 were considered statistically significant.

### RESULTS

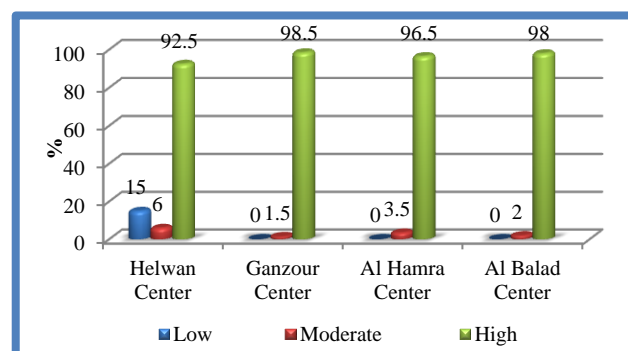
Except for (Ganzour Center) in Egypt; females significantly were predominant in the other studied three centers ( $p=0.012$ ). There were no statistically significant differences between both countries regarding the age of customers in the 4 centers. Mean $\pm$ SD=69.96 $\pm$ 7.0.

**Table 1: Comparison between the four centers regarding customers' satisfaction.**

Satisfaction dimension	Satisfaction score (%)						P value
	Egypt			Saudi Arabia			
	Helwan center (n=200)	Ganzour center (n=200)	Total	Al Hamra center (n=200)	Al Balad center (n=200)	Total	
Patient satisfaction of the healthcare givers (Doctors & Nurses)							
Mean±SD	77.9±9.1	84.2±8.1	81.1±9.2	82.5±9.4	81.2±9.5	81.8±9.5	0.288
Minimum	51.17	60.00	51.17	50.00	53.33	50.00	
Maximum	93.33	99.00	100.00	100.00	100.00	100.00	
Patient satisfaction of the availability of services							
Mean±SD	83.1±16.3	70.3±16.1	76.7±17.4	82.2±15.8	76.9±15.5	79.6±15.8	0.30*
Minimum	33.33	33.33	33.33	33.33	33.33	33.33	
Maximum	100	100	100.00	100.00	100.00	100.00	
Patient satisfaction of patients' rights							
Mean±SD	83.0±11.3	90.9±8.2	86.9±10.6	80.5±12.5	80.2±11.9	80.4±12.2	0.001*
Minimum	41.67	66.67	41.67	41.67	41.67	41.67	
Maximum	100.00	100.00	100.00	100.00	100.00	100.00	
Patient satisfaction of the cleanliness							
Mean±SD	57.2±7.9	54.1±9.0	55.6±8.6	80.1±9.8	74.5±9.5	77.3±10.1	0.001*
Minimum	33.33	33.33	33.33	53.33	46.67	46.67	
Maximum	37.33	73.33	73.33	100.00	93.33	100.00	
Total score of Patient satisfaction							
Mean±SD	75.8±5.9	76.8±5.4	76.3±5.6	81.5±6.6	78.8±6.1	80.1±6.5	0.001*
Minimum	56.67	62.33	56.67	61.33	64.00	61.33	
Maximum	88.80	89.80	89.80	94.47	94.00	94.47	

\* $P \leq 0.05$  is considered significant.

Comparing customers' satisfaction of geriatric health services in the four studied centers in both countries; there were no statistically significant differences between both countries regarding the patient satisfaction of the healthcare givers (Doctors and Nurses) of the 4 centers. However, the two studied centers in Saudi Arabia were significantly higher in patient satisfaction of the availability of services, patient satisfaction of the cleanliness and total score of patient satisfaction domains ( $p < 0.05$ ) than studied centers in Egypt, while the two studied centers in Egypt were significantly higher in Patient satisfaction of patients' rights domains ( $p < 0.05$ ) than studied centers in Saudi Arabia (Table 1).



**Figure 1: Total score of patient satisfaction.**

**Table 2: Levels of satisfaction between the four studied centers.**

	Egypt		Saudi Arabia				Total of 4 centers
	Helwan center (n=200) (%)	Ganzour center (n=200) (%)	Total (%)	Al hamra center (n=200) (%)	Al balad center (n=200) (%)	Total (%)	
Patient satisfaction of the healthcare givers (Doctors and Nurses)							
Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Moderate	18 (9.7)	4 (2.0)	22 (5.7)	11 (5.5)	15 (7.6)	26 (6.5)	48 (6.1)
High	167 (90.3)	195 (98.0)	362 (94.3)	189 (94.5)	183 (92.4)	372 (93.5)	734 (39.9)
Patient satisfaction of the availability of services							
Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Moderate	12 (8.1)	39 (34.2)	51 (19.4)	12 (7.7)	22 (17.3)	34 (12.1)	85 (15.6)
High	137 (91.9)	75 (65.8)	212 (80.6)	143 (92.3)	105 (82.7)	248 (87.9)	460 (84.4)
Patient satisfaction of patients' rights							
Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Moderate	7 (3.9)	2 (1.0)	7 (1.9)	15 (8.7)	15 (8.7)	30 (8.7)	37 (5.1)
High	171 (96.1)	198 (99.0)	369 (98.1)	91.3%	91.3%	314 (91.3)	683 (94.9)
Patient satisfaction of the cleanliness							
Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Moderate	149 (98.7)	160 (97.6)	309 (98.1)	9 (5.0)	25 (15.4)	34 (10.0)	343 (52.3)
High	2 (1.3)	4 (2.4)	6 (1.9)	170 (95.0)	137 (84.6)	307 (90.0)	313 (47.7)
Total score of patient satisfaction							
Low	3 (15.0)	0 (0.0)	3 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.4)
Moderate	12 (6.0)	3 (1.5)	15 (3.8)	7 (3.5)	4 (2.0)	11 (2.8)	26 (3.3)
High	185 (92.5)	197 (98.5)	382 (95.5)	193 (96.5)	196 (98.0)	389 (97.3)	771 (96.4)

There was high satisfaction level in both countries regarding the patient satisfaction of patients' rights and total score of patient satisfaction of the 4 centers. However, the two studied centers in Saudi Arabia were significantly higher in high level patient satisfaction of the availability of services, total score of patient satisfaction and patient satisfaction of the cleanliness than studied centers in Egypt, while the two studied centers in Egypt were significantly higher in high level of patient satisfaction of the healthcare givers (Doctors and Nurses) and of patients' rights than studied centers in Saudi Arabia (Table 2).

## DISCUSSION

This descriptive study was conducted to ascertain the patient satisfaction in outpatient department of the selected four centers. Total of 200 patients from each center were provided self-administered questionnaire. All respondents were taken from the patients who visited the OPD.

Study findings indicate that there were more females than males who were obtained the geriatric health centers in both countries. The female respondents were significantly higher than male respondents (55.52%) and (44.7%) respectively. This trend might suggest that there is a gender difference in older people attending hospitals. However, these suggestions are against similar report

which suggests that female have less access to health care than male.<sup>8</sup>

Patient satisfaction was assessed in terms of satisfaction of the healthcare givers, satisfaction of the availability of services, satisfaction of patients' rights and satisfaction of the cleanliness.

In our study, the mean score of total satisfaction was (80.1%) in Saudi Arabia and (76.3%) in Egypt (table). A total of (97.3%) of patients declared a high satisfaction rate, (2.2%) had moderate satisfaction in Saudi Arabia, while in Egypt (95.5%) of patients had a high satisfaction rate, (3.8%) had moderate satisfaction and only 0.8% (97.3%) declared a low satisfaction rate for the offered services.

The results of our study are close to those mentioned by a study -entitled "Satisfaction with outpatient geriatric evaluation and management" conducted in Washington, USA- in which the satisfaction rate of patients receiving geriatric cares was evaluated. About (81%) of care recipients had high satisfaction from the offered services.<sup>9</sup>

These results were higher than the reported by (Dehghani Ahmadabad et al.2016) in a similar study conducted in Iran to assess elderly patients' satisfaction with provided services, the mean score of total satisfaction was (65.4%) with only 25% of patients had a high satisfaction rate,



72% had moderate satisfaction, and 3% assessed this hospital low in offering services.<sup>10</sup>

Evidently, the significant differences in satisfaction scores can be explained by a number of factors as attending to special needs of the elderly in offering individual services, utilization of skilled personnel in taking care of elderly, existence of specialist in geriatric medicine, and cooperation with patients' family are among the most important issues.

When satisfaction was considered in terms of its different groupings i.e. healthcare givers, the availability of services, patients' rights and the cleanliness, it was found out that level of high satisfaction varies between 80 to 98% in both countries. The lowest percentage of high satisfaction was for cleanliness in studied centers in Egypt where the majority of elderly people reported the degree of satisfaction as moderate with only (1.9%) of high satisfaction which was significantly lower than those in Saudi Arabia, which goes hand with hand with a finding reported in a study conducted in Pakistan to assess patient satisfaction towards out-patient department services where the patients seem to be least satisfied with cleanliness (3.08%) in the hospital.<sup>11</sup> This difference between the countries is likely to be explained by the presence of special company for cleanness with at least 3 workers for each center in Saudi Arabia.

## CONCLUSION

This study has revealed that efforts to improve health care service for older people have not been fully implemented. Many older people still do not satisfy the offered medical service due to several obstacles. There is a need to review the policy for older people care. As the study findings reveals, the government should revise new mechanisms on improving health care for older people including introducing health insurance scheme for older people since it provides more coverage even in private hospitals.

A large volume of empirical research indicates the difficulties associated with combining care and work responsibilities, particularly caring for older people; but both countries –*Egypt and Saudi Arabia*– have the opportunity to benefit and learn from the policy successes and failures of more economically developed countries who have successfully overcome this demographic transition.

### Obstacles and limitations of the study

1. Sometimes the condition of the patients didn't allow easy interview. Therefore, data was collected from the persons accompanying the geriatric.
2. The need to repeat and explain the questions for much geriatrics particularly.

3. The revolution and the unsafe conditions which decreased the number of patients.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: The study was approved by the Institutional Ethics Committee of the Faculty of Medicine, Beni-Suef University*

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**Cite this article as:** Mostafa FSA, El-Shabrawy EM, Morsy EMAE, Senosy SA. Satisfaction to healthcare among elderly; comparison study between Egypt and Saudi Arabia. *Int J Community Med Public Health* 2018;5:3180-4.