ORIGINAL ARTICLE

Perceived health status of geriatric population living in old age homes and their access to health care facilities

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ABSTRACT

Background and Objective: The elderly face various health challenges in later life as their immune defenses deteriorate leaving them quite vulnerable and frail. The situation becomes all the more desperate when the basic health support system is compromised or simply unavailable. This study has been conducted to assess the perceived health status of residents of local old-age homes and their access to available health services.

Methods: This cross-sectional study was carried out on 119 elderly subjects living in old age homes (OAHs) in Lahore city of Pakistan. Using the Short Form 36 Health Survey Questionnaire, health-related outcomes of the geriatric population were assessed under eight domains while a self-structured questionnaire was used to determine the level of available health care facilities.

Results: The mean age of the study population was 69.88 ± 5.08 years The lowest mean score is observed in the pain domain i.e., 19.20 ± 12.12, whereas a little better score has been seen for emotional well-being i.e., (58.28 ± 26.58). Insufficient health care services have been regarded as a major issue for the elderly face in OAHs.

Conclusion: The elderly population living in OAHs suffer from poor health status and face multiple barriers to accessing basic health care facilities.

Keywords: Geriatric, old age homes, health care, SF36.

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Introduction

In recent years, we have witnessed a significant increase in adult life expectancy owing to a dramatic breakthrough in the area of medicine. In Pakistan, life expectancy has increased from 45 years to 69 years and beyond which seems to continue in times to come. World Health Organization (2003) has indicated the probability of healthy life in Pakistan as 54.2 years for men and 52.3 years for women, whereas, the expectation of disability-free life is 11.4 years at the age of 60.[1] With this rapid increase in the number of elderly individuals, their demand for adequate medical and psychological care from health care providers is also building up. The key goal for promoting physical and mental health (MH) of the elderly is the maintenance of adequate health-related quality while making simultaneous attempts at reducing morbidity and mortality.[2]

In Asian countries (Pakistan, India, and Bangladesh) older people, mostly depend on their families. Due to various factors including trends of urbanization, change in life priorities and materialistic attitudes, our family system, and values seem to be changing and old age homes (OAHs) are trending as an available alternative for them.[3] The aging population is an easy target of chronic disorders among which the most troublesome and common ones include ischemic heart disease, stroke, chronic obstructive pulmonary disease, diabetes, lower back pain, falls, visual impairment, dementia, hearing loss, osteoarthritis, and major depressive disorder.[4]

The psychological issues coupled with physical challenges require expert care services however residents of OAHs face many administrative and fiscal barriers to approaching health care services. The geriatrics-specific staff training is regretfully absent which certainly impedes the appropriate assessment of health status and effective and timely management of health disorders in these elderly populations.[5,6]

Inspired from the West, OAHs or shelter homes are an emerging phenomenon in Pakistan, which are becoming more and more common with the passage of time. Moreover, in Pakistan, empirical studies of the elderly population living in shelter homes are rare, primarily due to the traditional family framework.[7]

The use of healthcare services by the elderly depends on a variety of things like socio-demographic and cultural context, financial bearing, and the distribution of regional resources. Taking care of elderly health may be a serious undertaking for a responsive health care system. The economic impact, responsiveness to health emergencies, and positive health outcomes are the key components that need to be taken care of while dealing with the healthcare of the elderly.[8]

Nurses play a crucial role in delivering health services to the elderly like disease prevention and health promotion, encouraging them for healthy aging, and supporting them in decision making towards the end of their lives. Nurses and professional care providers should be trained as experts, who should have rich knowledge about the multiple progressive diseases and syndromes that are common among the elderly.[9]

This study was conducted to assess the perceived health status of residents of local old-age homes and their access to available health services in Lahore city of Pakistan.

Methods

This cross-sectional study was conducted from August, 2020 to December 2020 at the University of Health Sciences (UHS) in Lahore Pakistan in collaboration with the following old-age homes in Lahore.

- Dar-Ul-Kafala, Bhatta Chowk Lahore Cantt.
- Aafiat Social Welfare OAH Umar Chowk Township Lahore.
- Old Age Happy Home, Near Azmat Chowk Lahore.
- Heaven Homes Pak Arab housing society Feroz Pure Road Lahore.

After approval from the Ethical Review Committee of the UHS Lahore, 119 residents, 60 to 80 years of age, living in these old-age homes for more than 1 year were included. Subjects who demonstrated an inability for effective communication or were too ill to answer the questions of the survey properly were excluded.

Medical Outcomes Study Questionnaire Short Form 36 Health Survey (SF-36) was used as an instrument for the assessment of the health status of the elderly. The SF-36 has been deemed suitable for use with an elderly population in an interview setting.[10] This questionnaire was translated into Urdu and was pilot tested among 12 participants for reliability. SF-36 subscales score ranges from 0 to 100. The scoring of all domains was from 0 to 100 considering "0" as the worst possible status and "100" as the best possible status.[11]

Statistical analysis

Data had been collected, coded, and analyzed by using the Statistical Package for Social Sciences version 23.0. Descriptive statistics were used to describe the background characteristic profile of the respondents. Categorical variables were summarized into frequencies, percentages, and bar graphs, whereas, mean ± standard deviation (SD) had been used for quantitative variables. *p*-value of (<0.05), and a 95% confidence level at a 5% margin of error (1.96) were considered statistically significant. Mann-Whitney U Test was used to compare mean values of SF36 domains between male and female participants.

Results

In this study among 119 participants, 73 (61.3%) were males and 46 (39.7%) were females. The overall mean age was 69.88 ± 5.08 years. The mean duration of stay in OAH was 4.79 ± 2.33 years.

The mean score for physical functioning (PF) was calculated as 48.65 ± 11.98; role limitation due to physical health was recorded as 35.71 ± 46.32, role limitation due to emotional health was noted as 35.85 ± 46.97, Ewhile mean pain score was 19.20 ± 12.12 (Table 1).

PF (*p*-value = 0.050) and pain (*p*-value = 0.037) showed statistically significant difference among male and female scores. In both these domains, females had higher scores as compared to male participants. However, no significant gender difference was seen in scores of other domains (Table 2).

There was no regular medical facility available to OAH residents. A total of 88.2% of the respondents complained of inconsistent and inadequate medical care facilities. About 81.5% of the sample population reported delay in initiation of first hand treatment while 87% felt uncomfortable discussing their health issues with the healthcare providers and 93% of these respondents had to visit the health care service providers for one or the other reason during the past 6 months while none of them had an opportunity for health insurance (Table 3).

Table 1. *Mean SF-36 scores in different domains in total population (n = 119).*

S#	SF-36 domain	Total
1	PF	48.65 ± 11.98
2	Role limitations due to physical health	35.71 ± 46.32
3	Role limitations due to emotional problems	35.85 ± 46.97
4	Energy/ Fatigue	55.75 ± 28.71
5	Emotional well-being	58.28 ± 26.58
6	Social functioning (SF)	33.23 ± 14.38
7	Pain	19.20 ± 12.12
8	General health (GH)	39.72 ± 16.24

Table 2. *Comparison of SF-36 domain score in relation to gender.*

SF-36 domains	Male	Female	Male	Female	*p*-value*
	Mean ± SD		Median (interquartile range)		
PF	46.91 ± 12.3	51.42 ± 10.88	45 (15)	50 (21.25)	0.050
Role limitations (physical health)	31. 84 ± 45.31	41.84 ± 47.74	0.00 (100)	12.50 (100)	0.157
Role limitations (emotional problems)	31.50 ± 45.77	42.75 ± 48.51	0.00 (100)	0.00 (100)	0.181
Energy/Fatigue	55.89 ± 28.44	55.54 ± 29.44	60 (45)	52.50 (45)	0.839
Emotional well-being	59.89 ± 26.20	55.73 ± 27.27	68 (40)	50 (44)	0.414
SF	34.76 ± 14.64	30.81 ± 13.76	35 (25)	35 (15)	0.233
Pain	17.80 ± 12.19	21.41 ± 11.81	20 (10)	20 (10)	0.037
GH	41.88 ±14.72	36.30 ± 18.03	45 (22.50)	33.75 (32.50)	0.136

(*): Mann-Whitney U Test.

Discussion

A society should grant its citizens equal access to health care without any discrimination. OAH residents are unable to have periodic check-up facilities as they struggle to get medical access.[6]

A total of 119 elderly (73 males and 46 females) residing in old-age homes were selected and interviewed. The mean age of the participants was 69.88 ± 5.08 years. The study done by Qidwai et al.[12] was in agreement with our findings, where males were in majority in availing the facility of OAH. Mansouri et al.[13] conducted a study to determine the health status of the elderly and the mean age of the subjects (69.52 ± 7.4 years) was also similar to our result while mean duration of stay in OAHs was 4.79 ± 2.33 years.

In the current study, among the eight domains of the SF-36 questionaire, the score in the PF domain was 48.65 ± 11.98, whereas, it was 46.91 ± 12.3 in males and 51.42 ± 10.88 in females. In another study conducted by Ran et al.[14] almost similar results of PF (57.5 ± 23.2) were observed.

The mean score in the vitality (VT) (energy/ fatigue) domain was 55.75 ± 28.71.There was no notable difference between male and female participants' scoring. In the present study, the VT score in the elderly was totally in agreement with the previously reported study in Iran[15] (55.9 ± 22.1). In the emotional well-being domain, the overall mean score in the present study was 58.28 ± 26.58. This domain showed a high mean score among all other domains of the questionnaire. Similar results were concluded in another study where the mean score of MH domain was 57.2 ± 13.4.[14] Our study also gets support from the study of Hajian-Tilaki et al.[15] in which the MH mean score was 56.1 ± 19.6. GH score was 39.72 ± 16.24 (41.88 ± 14.72 in males and 36.30 ± 18.03 in females). The results from the reported Iraninan study show slightly higher (48.8 ± 19.3) collective score in the GH domain[15] whereas a study on Mexican Jewish community revealed at least two-tinmes higher average score (71.9) in the GH domain as compared to the present study.[16]

Two domains of SF36 are related to role limitation; one due to physical problems and the other due to emotional issues. The mean score remained nearly same in both domains in the present study. Tek and Karaçil-Ermumcu[17] however reported relatively better mean score (66 ± 10.93) in this domain as compared to our study.

The cumulative score of the SF domain was 33.23 ± 14. The poor social domain scores reflect the depressed state and poor social intervention and bonding between inmates of OAHs and with their family, friends, and community.[18]

In the bodily pain (BP) domain, the cumulative mean score was 19.20 ± 12.12. Significant differences in both genders were detected in the category of body pain. Another study

Table 3. *Survey results regarding availability and access to health care services to the respodents.*

S#	Questions	No	Yes
1	Do you have a regular doctor that you see for your disease?	119 (100%)	0 (0%)
2	Any indoor medical facility is available in the OAH?	90 (75.6%)	29 (24.4%)
3	Is it easy for you to schedule an appointment with a doctor?	109 (91.6%)	10 (8.4%)
4	Is there any periodical health status examination routine/ facility available?	119 (100%)	0 (0%)
5	Do you confront significant delays in accessing key services, particularly specialist care, diagnostic tests, or medicines?	22 (18.5%)	97 (81.5%)
6	Do you encounter unequal responses from health care providers regarding quality of care?	14 (11.8%)	105 (88.2%)
7	Have you ever felt stigmatized when seeking or receiving health care because of your social status?	108 (90.8%)	11 (9.2%)
8	Have you experienced refusal to provide treatment while you need long term care at the hospital?	119 (100%)	0 (0%)
9	Do you have access to transport in case of an emergency?	0 (0%)	119 (100%)
10	Do you feel comfortable asking your health care provider for related information?	87 (73.1%)	32 (26.9%)
11	Do you feel like you have enough information to understand the health care system?	74 (62.2%)	45 (37.8%)
12	Does your health care provider provide you health education?	75 (63%)	44 (37%)
13	Is the given health education, adequate?	82 (68.9%)	37 (31.1%)
14	Did you visit any doctor during the last 6 months?	8 (6.7%)	111 (93.3%)
15	Do you have health insurance?	119 (100%)	0 (0%)

by Pius et al.[19] in India has also shown compromised BP score of 40.2 ± 34.1 in old-age homes residents. In OAHs, usually physical therapy is not effectively managed by the staff and often overlooked in most of the reported studies.[20] Furthermore, there are some staff misconceptions about pain in this population as they stigmatize old age and abandoned status of the elderly as an attention seeking phenomenon.[21] Pakistan's health system focuses more on maternal and child health as well as infectious diseases. Due to the different priorities, treating diseases of the elderly or meeting their healthcare needs are not country's primary focus; the elderly group is mostly a neglected group in terms of healthcare service provision.[22]

It has been observed that there was limited or no access to regular health care or health examination facility for OAH residents. Three major barriers to health care access emerged during our study: unavailability of established health services, lack of quality health care, and financial dependency. Same findings were concluded by Doetsch et al.[23] in a study, where healthcare access for the elderly was found inadequate in four areas of the framework: availability; appropriateness; approachability; and affordability. Our research also gets support from another study by Kim et al.[24] in which he demonstrated the unmet health care needs of the elderly.

Healthcare accessibility has become an issue of social equity. Other than the availability of healthcare services, the second major issue is the poor quality of present healthcare services. A total of 73% of participants in our study feel uncomfortable about receiving health information because health problems of older people are usually dealt with by general practitioners or other specialists not by geriatric experts and only 37.8% seem to be satisfied with the health information provided by their care providers.

Health care facilities are based on a weak infrastructure due to inadequate allocation of the budget for the health sector.[7] Majority (93.3%) of participants reported that they had to seek a doctor's advice due to different health concerns in the last 6 months. Nobody has had health insurance, which makes affordability the third major barrier to accessing standardized healthcare facilities. Although medical care is cheaper in government hospitals, the quality of care is often said to be compromised. The provision of specialized healthcare services to the geriatric population is a big challenge in Pakistan that requires serious attention and a joint approach of policymakers and the health department and a joint effort by all stake holders and social activist may facilitate the aging residents of the old-age homes to lead a relatively better quality of life.

Conclusion

The overall health status of the residents of OAHs in Pakistan is highly compromised with inadequate quality health care and health education faciltities available. Non-affordability of healthcare expenditures, lack of transportation facilities, improper training, and poor insight into the old-age homes' management, cumulatively hamper these frail individuals from obtaining optimal health care facilities.

Limitations of the study

The study was based on the participants from those old-age homes that were more easily accessible to the researchers. The findings may not be generalized as significant variations from region to region and city to city prevail.

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List of Abbreviations

BP	Bodily pain
GH	General health
MH	Mental health
OAH	Old age home
PF	Physical functioning
SF	Social functioning
UHS	University of Health Sciences
VT	Vitality

Conflict of interest

None to declare.

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None to disclose.

Ethical approval

The study was approved by the Ethical Review Committee of the University of Health Sciences, Lahore, Pakistan vide letter NO.UHS/REG-20/ERC/1577 dated 20-August-2020.

Authors' contribution

NS: Conception & design of the work.

MG and SK: Drafting the work or revising it critically for important intellectual content.

FK and MQ: Acquisition, analysis, and interpretation of data.

ALL AUTHORS: Approval of the final version of the manuscript to be published.

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