

Understanding the Needs of Geriatric Rehabilitation Care

SAMAR ABBAS JAFFRI¹, SYEDA RIDA E ZEHRA², SADIA SULTAN³

¹Assistant Professor and Consultant Physician, Liaquat National Hospital and Medical College, Karachi

²Registrar, Department of Medicine, Liaquat National Hospital and Medical College, Karachi

³Consultant Haematologist, National Medical Centre Karachi

Correspondence to: Samar Abbas Jaffri, E-mail: abbasraza569@hotmail.com, Cell: +923212052050

ABSTRACT

Background: With the increasing age, the body undergoes several physical and psychiatric changes; it is important to address the healthcare management apprehensions among the elderly and promote geriatric rehabilitation care both socially and economically.

Objective: To evaluate the need for rehabilitation among the geriatric population living in Pakistan.

Design: Cross-sectional study

Place and Duration of Study: Department of Medicine, Liaquat National Hospital, Karachi from 1st January 2020 to 30th June 2020

Methodology: One hundred and three geriatric subjects aged between 65 to 90 years were enrolled. The data were collected using a structured questionnaire designed to obtain information regarding home care and geriatric rehabilitation care.

Results: Sixty (58.2%) were females and 43 (41.7%) were males. The majority were <80 years of age, 82 (79.6%). Around 52 (50.5%) subjects knew about rehabilitation care and most believed that geriatric rehabilitation care is beneficial. Sixty four (62.1%) subjects were involved in socialization once a week, 29 (28.2%) once in a month, 6 (5.8%) biannually and 4 (3.9%) marked not at all. Among all, 41% reported being isolated, and 86% were getting enough psychiatric/physical care at home.

Conclusion: Although 52 (50.5%) of the study subjects reported knowing geriatric rehabilitation care, due to limited resources and economic constraints in Pakistan, we have been unable to set up centers to rehabilitate the elderly. There is a need to design and conduct rehabilitation programs to control morbidity and improve the quality of the geriatric population.

Keywords: Geriatric rehabilitation care (GRC), Home care, Geriatric population

INTRODUCTION

From 1980 to 2017, the global geriatric population (>60 years) has increased from 382 million to 962 million. It is expected to increase up to 2.1 billion by 2050 with approximately a three-fold increase in those over 80 years of age¹, increasing by 250% in underdeveloped countries and 71% in developed countries.² With the increasing prevalence of the ageing population among majority countries, the expenses on geriatric health have exceeded rapidly, contributing to the economic burden.^{3,4} Moreover, the hospitalization risk also increases among the weak geriatric subjects with comorbid conditions where dependency becomes a major adverse outcome. For older frail patients presented to the hospitals either due to medical condition or fall injuries, a high rate of hospitalization-associated disabilities is observed with lesser chances for returning home independently.⁵

Through rehabilitation, the main aim is to identify and work on the individual's problem at a specific time, focusing on administering well-defined interventions by the integrative team for positive outcomes. Usually, a group of therapists and rehabilitation workers or, more appropriately, a multidisciplinary team is involved in the process, including occupational therapists, physical therapists, psychologists, speech therapists, dietitians and nurses.⁴ The geriatric rehabilitation of the elderly subjects focuses on providing physical therapy to improve the impaired musculoskeletal functioning. Also, it aids in the repair of joint, tendon and ligament, or it may also be linked to medication non adherence. It is evident that geriatric rehabilitation holds a positive impact on functioning, morbidity and mortality risk and hence improves the quality of life among older subjects.⁶

Rehabilitation care for geriatric subjects is now considered a necessity; hospital rehabilitation wards, community care centers, skilled nursing facilities (SNF's), and care homes are available for proper geriatric care internationally.⁷ The mortality rates and recovery chances are more among aged people kept under geriatric rehabilitation care (GRC) than those observed in general medical wards.⁸ As with ageing, the disease risk also increases, i.e. cognitive decline, stroke, orthopedics problems and fall injuries are highly prevalent among the elderly.⁹ Therefore, GRC is highly recommended after general treatment as it results in more rapid recovery.

Globally, well-managed health care facilities and programs are available for geriatric care, which decreased the associated

morbidity and mortality risk. But in Pakistan, we first need to recognize the significance of GRC in the life of elderly subjects. This study aimed to evaluate the knowledge and need of geriatric care for the older population of Pakistan.

MATERIALS AND METHODS

This cross-sectional single-center study was conducted in Pakistan. One hundred and three geriatric subjects of both genders were selected through purposive sampling, between 65 to 90 years of age. The study protocol was approved by the institutional ethics committee and all ethical guidelines were followed. Informed consent was obtained from each subject or the caretakers before enrolment. Data regarding their demographic details, factors associated with home care (socialization, isolation, psychiatric care, physical care and recreational activities) and knowledge of geriatric care were collected. The recorded data were analyzed using SPSS version 21.

RESULTS

79.6% were ≤80 years of age while 20.4% were >80 years. More females than males, 58.2% and 41.7%, majorly from Karachi 65% followed by 14.6% (Balochistan), 13.6% (Sindh) and a few from Afghanistan and Punjab (Table 1).

Table 1: Demographic characteristics of the study population

Variable	No.	%
Age (years)		
≤80	82	79.6
>80	21	21.4
Gender		
Male	43	41.7
Female	60	58.3
Marital status		
Single	3	2.9
Married	95	92.2
Widow	4	3.9
Separated	1	1.0
Residential area		
Karachi (Metropolitan City)	67	65.0
Balochistan (Province)	15	14.6
Sindh (Province, except Karachi)	14	13.6
Afghanistan (Country)	6	5.8
Punjab (Province)	1	1.0

Related to homecare, most of the subjects were involved in socializing with family and friends once a week, i.e. 62.1%, while 3.9% were not involved in any socialization. Moreover, 86.4% of the enrolled geriatric subjects were provided adequate psychiatric/physical care at home, while 13.6% could not obtain any care. Furthermore, recreational activities at home were not very common (Table 2).

The subject's familiarity with GRC and its need was also assessed, where 50.5% were aware of the rehabilitation centers and their activities. 89.3% preferred attending these group activities, and 95.1% were sure that rehabilitation centers would help improve health outcomes and provide several other benefits.

Table 2: Presenting the factors related to home care and rehabilitation care

Factors related to home care	No.	%
Socialization		
Once a week	64	62.1
Once in a month	29	28.2
Once in six months	6	5.8
Not at all	4	3.9
Isolation		
Yes	43	41.7
No	60	58.3
Adequate psychiatric/physical care		
Yes	89	86.4
No	14	13.6
Recreational activities		
Yes	34	33.0
No	69	67.0
Factors Related to GRC		
Knowledge about the rehabilitation center		
Yes	52	50.5
No	51	49.5
Prefer attending group activity if offered		
Yes	92	89.3
No	11	10.7
Attending a rehabilitation center will benefit		
Yes	98	95.1
No	5	4.9

DISCUSSION

The geriatric population is increasing rapidly among the developing countries, and due to the drastic epidemiological transitions, Asia has become the hub of the elderly population.¹⁰ The growing population is an issue, but the geriatric population growth has also worsened an economically suppressed country like Pakistan. Due to this, the healthcare management has to be modulated and strengthened for the challenges faced by or created by this massive dependent population with several interrelated health issues. The geriatric population is highly vulnerable to chronic illnesses like diabetes, heart diseases and hypertension etc.^{11,12} and with increasing age, their bodies are more prone to develop nutritional challenges, dependency and disabilities.^{13,14} The local healthcare facilitation, either residential or rehabilitation for the elderly population, is based on a weak infra-structure resulting in negligence.¹⁵

The location of care (LOC) is a new and significantly important aspect explored in geriatric care.¹⁶ In Pakistan the extended family model has been followed, enabling homecare facilitation to the geriatric members of the family, leading to increased satisfaction compared to that obtained by the paid rehabilitation care.¹⁷ But the nuclear family model is now replacing the old extended system due to economic constraints. Only a little is known about geriatric rehabilitation locally; as per the data provided, 50.5% knew geriatric rehabilitation while 49.5% had no clues (Table 2). The rehabilitation process supports not only the elderly but also the caregivers and family members at home and provides knowledge regarding the rehabilitation care and problems associated with homecare.¹⁸ Although, the overall health in the geriatric period is influenced by ageing in a desirable LOC.¹⁹ The healthcare provider, rehabilitation centers and policymakers are challenged by the high preference of elderly subjects to stick with

home care rather than rehabilitation care.²⁰ A few remain in support of standardized rehabilitation care, while several cases are observed where the elder subjects are undesirably compelled by their adverse health conditions to obtain rehabilitation care.²¹

Among many factors regulating health and wellbeing among the elderly population, care, social interaction, and activities are few significant ones. It is said that socializing plays a vital role in sustaining the overall health of geriatric people; interacting with friends and family provides social support and boosts both mental and physical health.²² Around 62.1% of aged subjects were involved in active socialization once a week, while only 3.9% weren't interested in socializing at home or with friends (Table 2). Social isolation leads to depression among the elderly population, supported by a Mexican study reporting high depression scores among older subjects encountering loneliness.²³ Moreover, homebound older people are more likely to develop psychiatric and physical problems ranging from metabolic, cardiovascular, neural and musculoskeletal diseases, etc.²⁴ Older adults have clinically multifaceted lives, and therefore the amount and quality of care and support are required can barely be accomplished by homecare.²⁵ Although the majority of the study subjects (86.4%) were in support that adequate level of psychiatric and physical support and care is provided at their homes (Table 2), this finding remains unjustified as it is limited to the self-reporting and hence specify the subject's understanding regarding the detail inquired.

The study results must be interpreted keeping the limitations in view; the findings cannot be used as standard due to self-reporting of the subject that can be a potential bias. The study subjects seemed to be highly satisfied with the homecare. Hence further studies are required to elaborate on the significance of this aspect in terms of economic viewpoints.

CONCLUSION

Although most of the study subjects reported knowing GRC and its benefits and favouring implementing geriatric rehabilitation, the local Pakistani culture doesn't support and promote rehabilitation. No such care has been given to the geriatric population, the idea remains uncommon. We need to rectify that for proper monitoring and management of elderly health, rehabilitation care must be considered.

REFERENCES

- Nations U. World Population Ageing 2017-Highlights. New York: Department of Economic and Social Affairs, United Nations. 2017.
- WHO. Ageing. Geneva: World Health Organization 2020.
- Stucki G, Bickenbach J, Gutenbrunner C, Melvin J. Rehabilitation: the health strategy of the 21st century. *J Rehabil Med* 2018; 50(4):309-16.
- World Health Organization. World report on disability 2011. World Health Organization; 2011.
- Lloyd C, Markland AD, Zhang Y, Fowler M, Harper S, Wright NC, et al. Prevalence of hospital-associated disability in older adults: A meta-analysis. *J Am Med Dir Assoc* 2020; 21(4):455-61.
- Wojzischke J, van Wijngaarden J, van den Berg C, Cetinyurek-Yavuz A, Diekmann R, Luiking Y, et al. Nutritional status and functionality in geriatric rehabilitation patients: a systematic review and meta-analysis. *Eur Geriatr Med* 2020;11(2):195-207.
- Holstege MS. The road to successful geriatric rehabilitation. Leiden: Leiden University Medical Center; 2017.
- Janssen MM, Vos W, Luijkx KG. Development of an evaluation tool for geriatric rehabilitation care. *BMC Geriatr* 2019; 206.
- Khan A, Ashraf A, Siddiqui H, Ahmed K, Ali F, Azam L, et al. Evaluating age-related cognitive performance; an observational pilot study. *APP* 2020;7:31-8.
- Bloom DE, Finlay JE. Demographic change and economic growth in Asia. *Asian Economic Policy Rev* 2009; 4(1):45-64.
- National Institute on ageing. Hearts and arteries: Health for older adults. [Online] 2010[Cited 2011 Nov 19]. Available from: <http://www.enotalone.com/article/10799.html>.
- Saleem T, Khalid U, Qidwai W. Geriatric patients' expectations of their physicians: findings from a tertiary care hospital in Pakistan. *BMC Health Services Res* 2009;9(1):1-10.

13. Ganatra HA, Zafar SN, Qidwai W, Rozi S. Prevalence and predictors of depression among an elderly population of Pakistan. *Aging Mental Health* 2008;12:349-56.
14. Lanier JB, Park JJ, Callahan RC. Anemia in older adults. *Am Fam Physician* 2018; 98(7):437-42.
15. Sheikh Jamal Hossain M, Ferdousi J, Siddique MA, Tipu SM, Qayyum MA, Laskar MS. Self-reported health problems, health care seeking behaviour and cost coping mechanism of older people: Implication for primary health care delivery in rural Bangladesh. *J Fam Med Primary Care* 2019;8(3):1209.
16. Bynum JPW, Meara ER, Chang CH, Rhoads JM, Bronner KK. *Our parents, ourselves: health care for an aging population: a report of the Dartmouth Atlas Project*. Lebanon, NH: The Dartmouth Institute of Health Policy & Clinical Practice; 2016.
17. Grant M, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Info Libr J* 2009;26(2):91-108.
18. Inal HS, Subaşı F. *New horizons in geriatric medicine*. USA: Nova Science Publishers. 2014
19. Somenahalli S, Shipton M. Examining the distribution of the elderly and accessibility to essential services. 2nd Conference of Transportation Research Group of India (2nd Ctrg) 2013;104:942-51.
20. AARP. *Fixing to stay: A national survey on housing and home modification issues*. American Association of Retired Persons, Washington DC. 2000.
21. Lord S, Després C. *Veillirenbanlieuenord-américaine: le rapport à la ville des personnesâgées*. *Gérontologie et société*. 2011;136(1):189–204.
22. The Importance of Socialization in Aging. [Updated: May 26, 2017] [Assessed: Feb 07,2019]. Available at: <https://eldercarealliance.org/blog/importance-of-socialization-in-aging/>
23. Gerst-Emerson K, Shovali TE, Markides KS. Loneliness among very old Mexican Americans: findings from the Hispanic Established Populations Epidemiologic studies of the elderly. *Arch Gerontol Geriatr* 2014;59: 145-9.
24. Altaf KF, Noushad S, Ahmed SZ. Mental stress decreases with older age in Karachi, Pakistan. *Int. J. Endorsing Health Sci. Res* 2014;2(1):19-21.
25. Aase I, Ree E, Johannessen T, Strømme T, Ullebust B, Holen-Rabbersvik E, et al. Talking about quality: how 'quality' is conceptualized in nursing homes and homecare. *BMC Health Services Res* 2021;21(1):1-2.