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Knowledge about different rehabilitation options in geriatric population: An original research

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***Abstract*---**Aim: The purpose of the present research was to evaluate the need for rehabilitation and various options for consideration amongst the geriatric population. 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

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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 education as well as lack of access led to more neglect of 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

As the developments in civilizations are increasing, the improvements in science and technology give rise to lengthen the life span; in this context, nowadays, the health prevention and quality of life issues are started to be considered among the basic needs of elderly population. Thus, physical, sensorial, psychological and cognitive changes that are eventually happening as aging occurs are needed to be delayed or supported by means of rehabilitative interventions. We may convey that rehabilitation of elderly is a complex process of multidisciplinary and interdisciplinary approaches, simply to improve the function and the quality of life of the elderly in any condition. However, the rehabilitation processes are not only to give services to the elderly but also to support the family members and the caregivers, and to increase their knowledge regarding to the issues of elderly home care. The involvement of elderly, their family and the caregivers to the process of rehabilitation is essential and profitable to achieve the most possible wellness of the elderly physically, cognitively, psychologically and socially.[1] The optimal functional level in home, in an institution or in the community is the fundamental aim of the geriatric rehabilitation. For instance, the aim may be simply to relieve the pain in knee joints due to osteoarthritis via physiotherapeutic approaches; however, the activity level of the elderly in home or in the institution is also important. Thus, while searching pain, it is important to question whether, the elderly is spending her/his time sitting and preferring mostly staying indoors or being eager to have an active life style. In other words, the activity level and the motivations of the elderly person should be searched and her/his expectations should be well understood. Besides the personal circumstances, the environment of the elderly is important in order to improve the functional level of the elderly and to urge them to have a much more active life style. In order to maintain the patients' long-term success of rehabilitation interventions, continuing to follow new patterns of behaviour and recommendations after discharge is important. Exercise programmes often fail to ensure the adherence of geriatric patients over a long period of time.[2] Negative infuences on adherence are likely to be factors such as sudden changes in health

status, lack of interest or motivation, low self-efficacy, weakness or low expectations of improvement. Patients who understood their health problem and the risks involved, and patients who selected the exercises in close consultation with a physiotherapist, showed a higher level of adherence.[3] No data on long-term adherence to dietary recommendations is known for older adults in the nutritional context. However, a study showed that continuation of nutritional counselling in combination with care provided by the general practitioner after a stay in hospital resulted in geriatric patients having a better nutritional and functional status than those who received only general practitioner follow-up care.[4] Alternatively, patients could be supported in the long term by using technical assistance systems (devices like mobile phones or tablets with sensors and software applications (health apps)). Existing health apps to promote activity address community-dwelling older adults who have already developed an awareness of the problem and focus strongly on planning and teaching training programmes rather than offering elements of information and education.[5,6] In addition, the target groups of previous health apps tend to be older people who are already active in sports groups, who live independently and are not affected by acute health problems.[7] An additional integration of nutritional issues does not take place in any of the mentioned apps. The health apps are therefore not directly transferable to the goal of improving changes in the nutrition and exercise behaviour of geriatric rehabilitation patients. Since older people require technical systems that take age related limitations (e.g. visual impairments or difficulties in fine motor skills) into account and also have less experience with and affinity for technology, the use of systems for younger target groups is also not an option.[8]

Aim Of The Present Study

The purpose of the present research was to evaluate the need for rehabilitation and various options for consideration amongst the geriatric population.

Methodology

This cross-sectional single-center study was conducted. 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 homecare (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%. 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. (Table 1) 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. 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)

Discussion

Rehabilitation services are offered in both inpatient and community-based sites. Inpatient care may be provided in rehabilitation centers (freestanding hospitals or units attached to acute hospitals), or nursing facilities. Outpatient rehabilitation services can be provided in hospital-based or independent clinics, in day hospital settings, or in the home. Eligibility requirements, the services provided, and costs vary across sites of care. These factors influence the balance of advantages and disadvantages for the individual patient and in turn influence the recommendations of the clinician. For many older adults, health professionals in several fields are required if their rehabilitation needs are to be met. The primary goal of multidisciplinary team management is to ensure that patients receive comprehensive assessments and interventions for the disabling illness and for associated comorbid conditions. All health professionals who work with older adults should have a basic understanding of the roles and functions of various rehabilitation team members. 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. 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.[9,10] The geriatric population is highly vulnerable to chronic illnesses like diabetes, heart diseases and hypertension etc and with increasing age, their bodies are more prone to develop nutritional challenges, dependency and disabilities.[11,12] The local healthcare facilitation, either residential or rehabilitation for the elderly population, is based on a weak infra-structure resulting in negligence.[13] The location of care (LOC) is a new and significantly important aspect explored in geriatric care.[14] In India 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.[15] 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. 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.[16] Although, the overall health in the geriatric period is influenced by ageing in a desirable LOC.[17] 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.[18] 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.[19] 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.[20] 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. Social isolation leads to depression among the elderly population, supported by a Mexican study reporting high depression scores among older subjects encountering loneliness.[21] Moreover, homebound older people are more likely to develop psychiatric and physical problems ranging from metabolic, cardiovascular, neural and musculoskeletal diseases, etc.[22] Older adults have clinically multifaceted lives, and therefore the amount and quality of care and support are required can barely be accomplished by homecare.[23] 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, this finding remains unjustified as it is limited to the self-reporting and hence specify the subject's understanding regarding the detail inquired.

Conclusion

Although most of the study subjects reported knowing GRC and its benefits and favouring implementing geriatric rehabilitation, the local Indian culture doesn't support and promote rehabilitation. We need to rectify that for proper monitoring and management of elderly health, rehabilitation care must be considered.

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TABLES

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

Table 2- 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
Knowledge about the rehabilitation center		
Yes	52	50.5
No	51	49.5
Attending a rehabilitation center will benefit		
Yes	98	95.1
No	5	4.9