

Assessing Basic Rehabilitation Services for Elders with Mobility Impairment

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How to cite this paper: Baiden-Amissah, E.B., Dai, B.Z., Atingabili, S. and Gyasi, P.A. (2022) Assessing Basic Rehabilitation Services for Elders with Mobility Impairment. *Open Journal of Therapy and Rehabilitation*, **10**, 62-77.
<https://doi.org/10.4236/ojtr.2022.102006>

Received: March 1, 2022

Accepted: May 14, 2022

Published: May 17, 2022

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Abstract

The current research seeks to examine the basic rehabilitation services for elders with mobility impairment. The research relied upon a quantitative approach and primary data which was gathered through the Drop-Off and Pick-Up (DOPU) method. The targeted respondents of this study were made up of healthcare workers, such as nurses and doctors from a group of hospitals in Zimbabwe. Therapy, assistive technologies, rehabilitation medicine, community-delivered rehabilitation were identified as the basic rehabilitation services for elders with mobility impairment. To assess the effectiveness of these services, the strength of these services had to be tested on the successful implementation of rehabilitation programs using a Structural Equation Model. In addition, these services were regarded as the independent variables of this study; while the successful implementation of the rehabilitation program was treated as a dependent variable. Based on the findings of this study, therapy, assistive technologies, rehabilitation medicine, community-delivered rehabilitation have a positive effect on the successful implementation of a rehabilitation program. The study recommends that to preserve the function and mobility among elderly and ageing individuals, the healthcare practitioners should promote strategies such as maximizing function by decreasing pain, improving the ability to self-propel and prolonging mobility and endurance through ergonomics, individualized wheelchair selection and configuration, and adaptations for increasing the capacity to handle the daily mobility demands through training, strengthening, and exercise.

Keywords

Rehabilitation, Rehabilitation Services, Mobility Impairment, Elders with Mobility Impairment

1. Introduction

Rehabilitation is a health strategy that enables people experiencing disabilities to achieve and maintain optimal functioning. From a health policy perspective, Stucki, Bickenbach [1] highlighted the view that rehabilitation is the most relevant health strategy of the 21st century. Rehabilitation is an integral part of universal health coverage (UHC) and therefore should be available for every person in need [2]. Furthermore, the UN Convention on the Rights of Persons with Disabilities (UNCRPD) urges countries to provide rehabilitation services. The World Health Organization (WHO) estimates that over one billion people, or 15% of the global population, live with a disability [3]. Disability as defined by the International Classification of Functioning, Disability and Health (ICF), is an umbrella term for impairments, activity limitations and participation restrictions [4].

People with disabilities experience impairment because of a health condition. Contextual factors, both at the individual and wider societal level, play a crucial role in an individual's experience of the impairment. People with disabilities often experience poorer levels of health than people without disabilities for various reasons. By definition, people with disabilities have an underlying health condition that causes greater health needs. For example, people with chronic health conditions such as arthritis have regular ongoing health needs relating to the health condition and associated impairment [5].

Physical dysfunctions are sub-divided into three major areas, namely orthopaedic, neurological and other health impairments. The physically impaired individuals are defined as those who have problems of mobility, manual dexterity and other health impairments which may be congenital or acquired. Nanjwan and Plang [6] said that the provision of rehabilitation for persons with special needs requires different rehabilitation processes. It can be seen that without rehabilitation, the education of a person with special needs may likely be affected in negative ways. The rehabilitation process is different for everyone depending on the impairment and the needs of the individual. Rehabilitation programmes should be individualized, catering to each person's unique needs, because no two deformities are exactly alike. Nanjwan and Plang [6] further suggested that provision of service to persons with special needs can be done by different categories of people, such as the government, community, private organization and individuals. It embraces the view that any of the categories should be allowed the opportunities to participate in a given rehabilitation programme for persons with special needs.

Rehabilitation has previously received little attention from governments, which has contributed to poor service availability and lack of coordination between services, yet it seeks to improve the functioning of people experiencing disabilities. As such, the current research seeks to assess the basic rehabilitation services for elders with mobility impairment. The findings of this research will contribute to the development of policies that cater for equity, diversity and inclusion.

2. Literature Review

2.1. Function and Mobility Impairment among Elderly and Aging Individuals

The three most compelling reasons to target the elderly and those ageing with and into disability are: 1) this is the fastest-growing age group in the world [7]; 2) healthcare costs are highest among the older group and 3) clinically, this group has a high rate of chronic conditions and functional limitations resulting in the high health care utilization [8]. While, longer life spans are generally considered desirable, particularly when healthy years of life are increased, with an ageing population and longer life expectancy comes an increasing prevalence of chronic diseases and conditions associated with ageing that can significantly reduce the quality of life [8].

The elderly and ageing population is usually diagnosed with spinal cord injury, stroke, transverse myelitis, osteoarthritis, lower-extremity amputation, poliomyelitis, myelomeningocele, Guillain-Barre syndrome, multiple sclerosis, amyotrophic lateral sclerosis and cerebral palsy, as well as neurological deficits and being unable to ambulate with an aid of a cane or walker [8]. Elderly and person ageing with a neurological condition experience a greater level of sensory loss, fatigue, pain, and depression [9] that further exacerbate difficulties in activities of daily living [10], maintenance of physical activities [11], and increasing needs for assistance [12], and quality of life [13]. People who use a manual wheelchair commonly report fatigue and musculoskeletal pain in the wrist, shoulder, neck, and back, most often due to increased demands of mobility [14].

Elderly and ageing manual wheelchair users have an increased risk for accelerated loss of function and mobility that greatly limits independence and affects the quality of life. The recommendations for preserving function and mobility among elderly and ageing individuals include; maximizing function by decreasing pain, improving the ability to self-propel, and prolonging mobility and endurance through ergonomics, individualized wheelchair selection and configuration, and adaptations for increasing the capacity to handle the daily mobility demands through training, strengthening, and exercise [8]. Previous studies have reported that 61% of their sample of older adults reported difficulty with manual wheelchair propulsion, indicating that mobility devices provided for older adults may not be meeting their needs [15] [16].

By 2050, the number of adults aged 60 years and older will double from approximately 10% to 20% of the world's population. It likely will be the first time that older adults outnumber younger adults [17]. Recent studies suggest that people with disabilities represent 10% to 12% of the world's population [18].

The ageing of the population will undoubtedly result in higher levels of physical and cognitive disabilities that result from the ageing process and chronic disease conditions that plague older adults. Mobility impairments in community-dwelling older adults represent a preclinical transitional stage in the pathway to disability. Those who lose independent mobility are less likely to remain in

the community, have higher rates of disease, have a poorer quality of life, and have a greater likelihood of social isolation [19].

2.2. Rehabilitation 8

Rehabilitation is defined as a set of measures that assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments. According to World Health Organization [20], rehabilitation is defined as a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment.

The process of service development for people with disabilities in developing countries is called community-based rehabilitation (CBR) [21]. CBR was developed because institutional rehabilitation was not meeting the needs of persons with disabilities worldwide [21]. In Zimbabwe, CBR was developed both by the government, with World Health Organization (WHO) and International Labour Organisation assistance, and by the civil society sector. In the Manicaland Province of Zimbabwe, World Vision has taken the lead in the adoption of community-based rehabilitation programmes. The programme, which started in 2002, targeted the 6 wards (12, 16, 17, 18, 20 and 22) in Chipinge district where World Vision is operating [22]. In a study that was conducted by Bongo, Dziruni [22], participants were asked to comment on the extent of involvement of local leaders in the community-based rehabilitation programme. Of the respondents, 32% said that local leaders were highly involved, while 49% indicated that they were involved. Only 5% indicated that local leaders were not involved. This high level of involvement of local leaders contributed towards the achievement of positive outcomes for the rehabilitation programme. Hence, the community has a pivotal role to play in as far as the execution of any rehabilitation program is concerned.

Affordable and high-quality services should be available to all those in need. This is the main premise behind Universal Health Coverage (UHC), which is defined as ensuring that all people have access to needed promotive, preventive, curative, rehabilitative and palliative services they need, of sufficient quality to be effective, while ensuring that the use of these services does not expose the user to financial hardships [23]. UHC is recognized as a key target in Goal 3 of the Sustainable Development Goals (SDGs) which is to ensure healthy lives and promote well-being for all of all ages (United Nations, n.d), and so access to rehabilitation is essential to reach the SDG goals and targets.

Access to rehabilitation for people with disabilities is also a human right, as stated in Article 26 of the United Nations Convention for the Rights on People with Disabilities (UNCRPD) (United Nations, n.d). Recent global initiatives such as the Global Co-operative on Assistive Health Technology (GATE) strive for affordable and high-quality assistive technologies to be available for all those in need [3].

Rehabilitation reduces the impact of a broad range of health conditions. Typ-

ically, rehabilitation occurs for a specific period, but can involve single or multiple interventions delivered by an individual or a team of rehabilitation workers and can be needed from the acute or initial phase immediately following recognition of a health condition through to post-acute and maintenance phases [2]. In simpler terms, rehabilitation helps a child, adult or older person to be as independent as possible in everyday activities and enables participation in education, work, recreation and meaningful life roles such as taking care of family. It does so by addressing underlying conditions such as pain and improving the way an individual function in everyday life, supporting them to overcome difficulties with thinking, seeing, hearing, communicating, eating or moving around.

Rehabilitation is highly person-centred, meaning that the interventions and approach selected for each individual depends on their goals and preferences. Rehabilitation can be provided in many different settings, from inpatient or outpatient hospital settings to private clinics, or community settings such as an individual's home. The rehabilitation workforce is made up of different health workers, including but not limited to physiotherapists, occupational therapists, speech and language therapists and audiologists, orthoptists and prosthetists, clinical psychologists, physical medicine and rehabilitation doctors, and rehabilitation nurses [3].

Article 26 of the Habilitation and Rehabilitation, of the United Nations Convention on the Rights of Persons with Disabilities (CRPD), calls for appropriate measures, including through peer support, to enable persons with disabilities to attain and maintain their maximum independence, full physical, mental, social and vocational ability, and full inclusion and participation in all aspects of life [5]. The Article further calls on countries to organize, strengthen, and extend comprehensive rehabilitation services and programmes, which should begin as early as possible, based on the multidisciplinary assessment of individual needs and strengths and including the provision of assistive devices and technologies.

2.3. The Benefits of Rehabilitation

Rehabilitation can reduce the impact of a broad range of health conditions, including diseases, illnesses or injuries. It can also complement other health interventions such as medical and surgical interventions, helping to achieve the best outcome possible. For example, rehabilitation can help to reduce, manage or prevent complications associated with many health conditions, such as spinal cord injury, stroke, or a fracture [2].

Rehabilitation also helps to minimize or slow down the disabling effects of chronic health conditions such as cardiovascular disease, cancer and diabetes by equipping people with self-management strategies and the assistive products they require or by addressing pain or other complications [4].

Rehabilitation is an investment, with cost benefits for both the individuals and society. It can help to avoid costly hospitalization, reduce hospital length of stay and prevent re-admissions. Rehabilitation also enables individuals to participate

in education and gainful employment, remain independent at home and minimize the need for financial or caregiver support. Rehabilitation is an important part of universal health coverage and is a key strategy for achieving Sustainable Development Goal 3 which is to ensure healthy lives and promote wellbeing for all at all ages [20]. The rehabilitation measures in this research are broadly divided into four categories namely: therapy, assistive technologies, rehabilitation medicine and community-delivered rehabilitation.

2.4. Therapy

Therapy is concerned with restoring and compensating for the loss of functioning and preventing or slowing deterioration in functioning in every area of a person's life. Therapists and rehabilitation workers include occupational therapists, orthoptists, physiotherapists, prosthetists, psychologists, rehabilitation and technical assistants, social workers, and speech and language therapists [24]. Therapy measures include training, exercises, compensatory strategies, education, support and counselling, modifications to the environment, provision of resources and assistive technology. Convincing evidence shows that some therapy measures improve rehabilitation outcomes. For example, exercise therapy in a broad range of health conditions including cystic fibrosis, frailness in elderly people, stroke, osteoarthritis in the knee and hip, heart disease, and low back pain has contributed to increased strength, endurance and flexibility of joints. It also improves balance, posture and a range of motion or functional mobility, and reduces the risk of falls [25]. Therapy interventions have also been found to be suitable for the long-term care of older persons to reduce disability [26]. Some studies show that training in activities of daily living has positive outcomes for people with stroke. Hence, as a basic rehabilitation service for elders with mobility impairment, therapy plays a pivotal role.

2.5. Rehabilitation Medicine

Rehabilitation medicine is concerned with improving functioning through the diagnosis and treatment of health conditions, reducing impairments and preventing or treating complications [27]. Doctors with specific expertise in medical rehabilitation are referred to as physiatrists, rehabilitation doctors or physical and rehabilitation specialists [28]. Medical specialists such as psychiatrists, paediatricians, geriatricians, ophthalmologists, neurosurgeons and orthopaedic surgeons can be involved in rehabilitation medicine, as can a broad range of therapists. In many parts of the world where specialists in rehabilitation medicine are not available, services may be provided by doctors and therapists. Rehabilitation medicine has shown positive outcomes, for example, in improving joint and limb function, pain management, wound healing, and psychosocial well-being [28].

2.6. Community-Delivered Rehabilitation

Community-delivered rehabilitation interventions are an important part of the

continuum of rehabilitation services and can help improve the efficiency and effectiveness of inpatient rehabilitation services [29]. A systematic review of the effectiveness of community-based interventions to maintain physical function and independence in elderly people found that the interventions reduced the number of falls and admissions to nursing homes and hospitals, and improved physical function [30]. Community-delivered services also respond to workforce shortages, geographical population dispersion, changing demographics, and technological innovations [2]. Efforts to provide rehabilitation more flexibly are increasing, including home-based services and schools. Rehabilitation services should be provided as close as possible to people's homes and communities.

As stipulated by Bowker, Price [24], examples of measures in community-based rehabilitation include: Delivering simple therapeutic strategies through rehabilitation workers or teaching to individuals with disabilities or a family member. Examples include adopting a better posture to prevent contractures and training in daily living skills [2], providing individual or group-based education. Hence, based on the above discussion, the following model was developed.

3. Research Model

Proposed Hypotheses (**Figure 1**)

Hypothesis 1: *Therapy has a positive effect on the successful implementation of a rehabilitation program.*

Hypothesis 2: *Assistive technologies have a positive effect on the successful implementation of a rehabilitation program.*

Hypothesis 3: *Rehabilitation medicine has a positive effect on the successful implementation of a rehabilitation program.*

Hypothesis 4: *Community-delivered rehabilitation has a positive effect on the successful implementation of a rehabilitation program.*

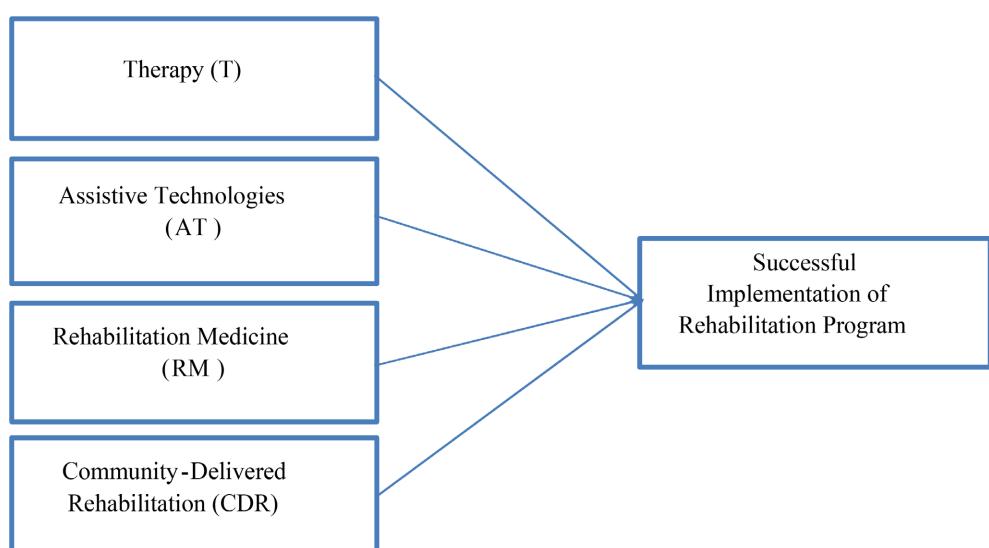


Figure 1. Research model.

4. Research Methodology

This research relied on a quantitative approach, and primary data was collected through the Drop-Off and Pick-Up (DOPU) technique. This method of data collection was chosen based on its high response rate. The targeted respondents of this study were made up of healthcare workers such as nurses and doctors from a group of hospitals in Zimbabwe. They were randomly selected based on their medical expertise, especially on issues related to rehabilitation.

Therapy, assistive technologies, rehabilitation medicine, community-delivered rehabilitation were regarded as the independent variables of this study; while successful implementation of the rehabilitation program was treated as a dependent variable. The measurement items were developed based on the extant literature and the objectives of this research.

Data entry and analysis was conducted on a Statistical Package for Social Sciences (SPSS version 20). SPSS version 20 was also used for reliability analysis, through the use of Cronbach's Alpha. Statistical software called AMOS (version 20) was then utilised for Structural Equation Modeling (SEM). The model included all the measurement constructs of this study. A Structural Model also produced the results of a Confirmatory Factor Analysis (CFA), which were then used to assess the validity and acceptability of the internal consistency of the measurement items of this study. The results of hypotheses testing were also obtained from the output of this structural model.

5. Regression Model

This research seeks to examine the basic rehabilitation services for elders with mobility impairment. Based on the literature review, therapy, assistive technologies, rehabilitation medicine and community-delivered rehabilitation were identified as the basic rehabilitation services for elders with mobility impairment, and they were regarded as the independent variables of this study, while the successful implementation of the rehabilitation program was treated as a dependent variable. Based on this relationship, a regression model was crafted. Therapy, assistive technologies, rehabilitation medicine and community-delivered rehabilitation were regressed on the successful implementation of a rehabilitation program.

The model is illustrated as follows:

$$\text{SIRP} = f(\text{T}, \text{AT}, \text{RM}, \text{CDR}) \quad (1)$$

The model was expanded into a linear mathematical relationship as follows:

$$\text{SIRP} = \beta_0 + \beta_1 \text{T} + \beta_2 \text{AT} + \beta_3 \text{RM} + \beta_4 \text{CDR} + \varepsilon \quad (2)$$

where:

Therapy = T

Assistive Technologies = AT

Rehabilitation Medicine = RM

Community-Delivered Rehabilitation = CDR

Successful Implementation of Rehabilitation Program = SIRP

5.1. Data Analysis and Results Interpretation

Out of 379 respondents, 203 (53.6%) were males, while 176 (46.4%) were females (**Table 1**).

Out of 379 respondents, 76 (20.1%) were aged below 21 years, 152 (40.1%) were aged between 21 and 30 years, while 151 (39.8%) were aged between 31 and 40 years (**Table 2**).

On education, 234 (61.7%) had attained Diplomas, while 110 (29.0%) were holding Bachelor's Degrees, whereas 35 (9.2%) had attained Master's Degrees (**Figure 2**).

5.2. Reliability Test

Reliability analysis was conducted on SPSS Version 20, through the use of Cronbach's alpha, in order to assess the internal consistency of the measurement constructs of this study. Based on the results, all the values of internal consistency were acceptable.

The values were recorded between 0.774 and 0.892. According to Nunnally (1978), an acceptable alpha should at least range above 0.70. To be more specific,

Table 1. Gender of participants.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	203	53.6	53.6	53.6
Female	176	46.4	46.4	100
Total	379	100	100	

Table 2. Age of participants.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 20 years and below	76	20.1	20.1	20.1
21 to 30 years	152	40.1	40.1	60.2
31 to 40 years	151	39.8	39.8	100
Total	379	100	100	

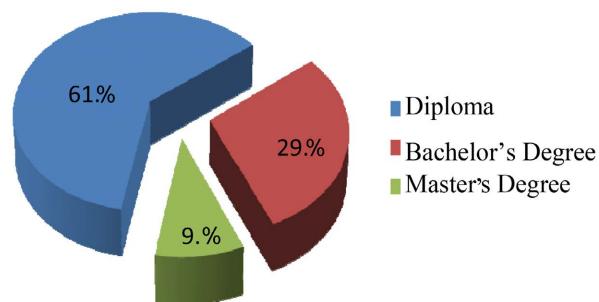


Figure 2. Highest level of education.

therapy obtained the value of 0.892, while assistive technologies attained 0.808. Rehabilitation medicine accounted for 0.792, community-delivered rehabilitation recorded 0.774. Successful implementation of the rehabilitation program obtained the value of 0.802. There were 5 items per developed variable (**Table 3**).

5.3. Confirmatory Factor Analysis

A confirmatory factor analysis (CFA) was carried out to assess the validity of the developed measurement constructs of this study. It was conducted on AMOS version 20 through the use of a structural equation model that constituted all the measurement items of the study. The results of a confirmatory factor analysis indicate that all the factor loadings are acceptable, as they all ranged between 0.55 and 0.87 respectively. As such, all the developed constructs of this research are valid (**Table 4**).

Table 3. Reliability analysis on Cronbach's alpha.

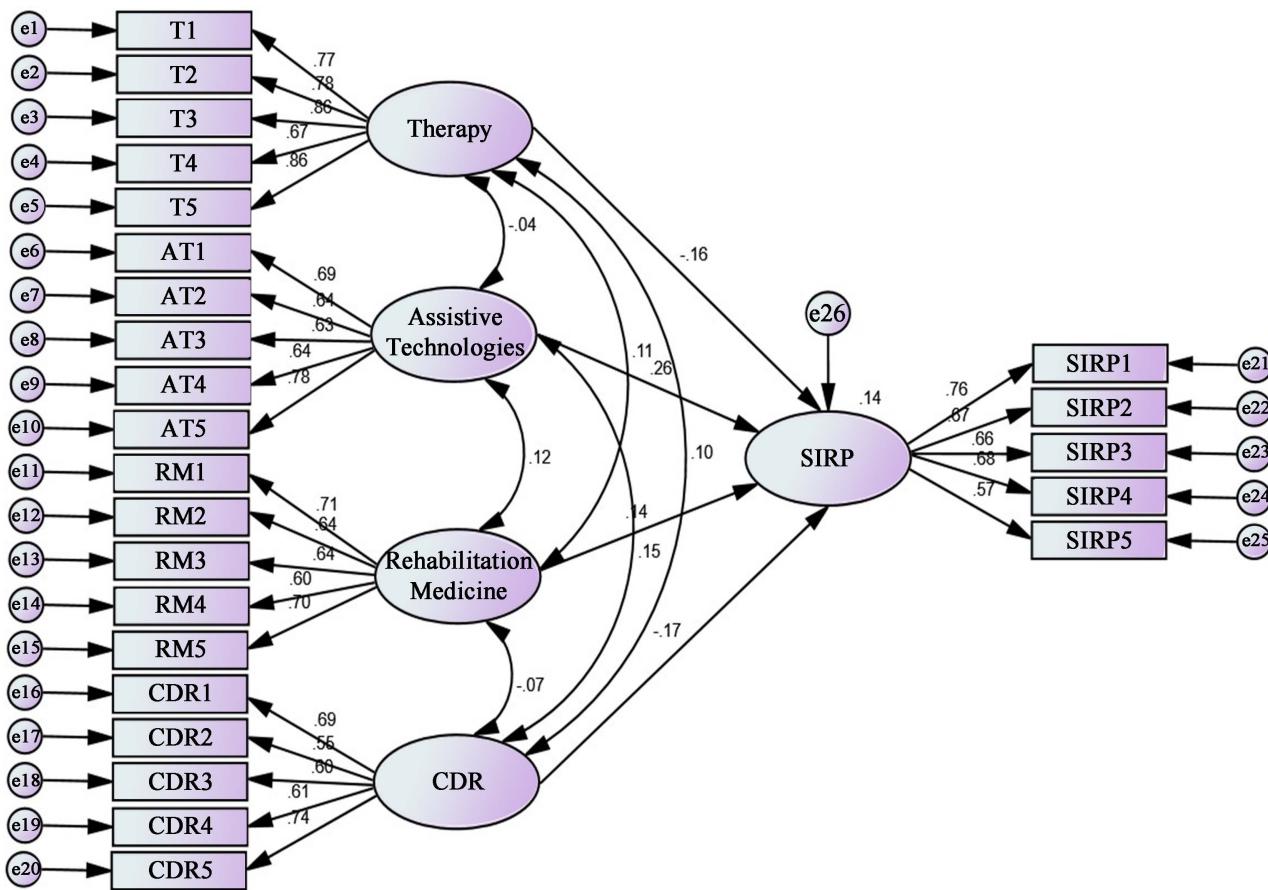
Constructs	Number of Items	Cronbach's Alpha
Therapy	5	0.892
Assistive Technologies	5	0.808
Rehabilitation Medicine	5	0.792
Community-Delivered Rehabilitation	5	0.774
Successful implementation of rehabilitation program	5	0.802

Table 4. Construct measurement items and factor loadings.

Constructs	Items	Factor Loadings	No. of Factors	Reliability
Therapy (T)	T1	0.77	5	0.892
	T2	0.78		
	T3	0.86		
	T4	0.67		
	T5	0.87		
Assistive Technologies (AT)	AT1	0.69	5	0.808
	AT2	0.65		
	AT3	0.63		
	AT4	0.64		
	AT5	0.78		
Rehabilitation Medicine (RM)	RM1	0.71	5	0.792
	RM2	0.64		
	RM3	0.64		
	RM4	0.60		
	RM5	0.70		

Continued

Community-Delivered Rehabilitation (CDR)	CDR1	0.69	5	0.774
	CDR2	0.55		
	CDR3	0.60		
	CDR4	0.61		
	CDR5	0.74		
Successful Implementation of Rehabilitation Program (SIRP)	SIRP1	0.76	5	0.802
	SIRP2	0.67		
	SIRP3	0.66		
	SIRP4	0.68		
	SIRP5	0.57		

**Figure 3.** Structural equation model.**5.4. Structural Equation Model**

A structural equation model (SEM) was then constructed on AMOS Version 20. The model achieved a good fit, giving the value of Chi-square = 652.600, Degrees of freedom = 265, GFI = 0.882, AGFI = 0.855, TLI = 0.872, CFI = 0.887, RMSEA = 0.062 (**Figure 3**).

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 325

Number of distinct parameters to be estimated: 60

Degrees of freedom (325 - 60): 265

Result (Default model)

Minimum was achieved

Chi-square = 652.600

Degrees of freedom = 265

Probability level = 0.000.

Based on the results of hypotheses testing, all the independent variables of this study have a positive effect on the dependent variable. In other words; therapy, assistive technologies, rehabilitation medicine and community-delivered rehabilitation have a positive effect on the successful implementation of rehabilitation program (**Table 5**).

6. Results Discussion

The results indicate that; therapy has a positive effect on the successful implementation of rehabilitation program: (standardized estimates = -0.123, t-value = -2.672, $p < 0.05$). Community-delivered rehabilitation has a positive effect on the successful implementation of rehabilitation program: (standardized estimates = -0.136, t-value = -2.643, $p < 0.05$). The findings also reveal that assistive technologies have a positive effect on the successful implementation of rehabilitation program: (standardized estimates = 0.188, t-value = 3.880, $p < 0.05$). According to the results, rehabilitation medicine has a positive effect on the successful implementation of rehabilitation program: (standardized estimates = 0.108, t-value = 2.176, $p < 0.05$).

Strategies to Preserve Mobility for Elderly and Aging Population [8]

- Minimize the frequency of repetitive upper limb tasks and reduce the forces required to complete the task.
- Minimize extreme or potentially injurious positions at the shoulder by avoiding extreme internal rotation and abduction.
- Recommend a customizable manual wheelchair. Use wheels and tires with the least rolling resistance.
- Prescribe a custom configurable wheelchair.

Table 5. Results of hypotheses testing/regression weights: (Group number 1 - default model).

Hypothesized Effect	Estimate	S.E.	C.R. P	Label
SIRP \leftarrow Therapy	-0.123	0.046	-2.672	0.008 Positive
SIRP \leftarrow CDR	-0.136	0.051	-2.643	0.008 Positive
SIRP \leftarrow Assistive Technologies	0.188	0.048	3.88	*** Positive
SIRP \leftarrow Rehabilitation Medicine	0.108	0.049	2.176	0.030 Positive

- Promote an appropriate seated posture and stabilization relative to balance and stability needs. Minimize the distance and obstacles between the wheelchair and the transfer location before transferring.
- Incorporate flexibility exercises, endurance and resistance training into an overall adult fitness program. The training should be sufficient to maintain normal glenohumeral motion. The training should be individualized and progressive, should be of sufficient intensity to enhance strength and muscular endurance, and should provide stimulus to exercise the entire major muscle groups to pain-free fatigue.
- For treatment, a population at risk for mobility impairments needs to be identified and treated for an indefinite amount of time. To meet these challenges, treatment and prevention of mobility impairments will require a major collaborative effort (that is; psychologists, geriatricians, and exercise physiologists). It is hoped that overcoming these challenges will reduce the burden of mobility impairments for older adults and their families [17].

7. Conclusion

Rehabilitation is quite vital to people who have undergone different conditions affecting either the physical or mental state of a person. They could even be confined in such facilities either voluntarily or not, as long as the main goal would be recovery. This can be achieved with the help of professionals with a different set of skills and techniques from the programmes rendered by the Rehabilitation Centers available in the community. Efforts to educate the public about persons with special needs are still lacking. There is no specific policy on the rehabilitation process. A describable way of enlightenment should be adopted for the successful identification and treatment of persons with special needs since individuals with various problems are of different types. Referral of special needs persons for treatment, education and employment purposes should be made to appropriate places such as hospitals, schools and government entities. There should be the provision of special equipment and facilities for effective rehabilitation. People should have ample knowledge about the care and treatment of the handicapped. Proper rehabilitation for special needs persons should not be denied upon.

8. Recommendations

The priority of rehabilitation is to ensure access to appropriate, timely, affordable and high-quality rehabilitation interventions for all those who need those [24]. Therefore, the following recommendations have been proposed: Governments should develop, implement, and monitor policies, regulatory mechanisms, and standards for rehabilitation services, as well as promote equal access to those services. In addition, the government should also develop or revise national rehabilitation plans, following situation analysis, to maximize functioning within the population in a financially sustainable manner, train non-specialist health professionals such as doctors, nurses, primary care workers on disability

and rehabilitation relevant to their roles and responsibilities. The government should also come up with public funding that is targeted at persons with disabilities, with priority given to essential elements of rehabilitation including assistive devices and people with disability who cannot afford to pay. It is also important to develop basic rehabilitation services within the existing health infrastructure and strengthen community-based rehabilitation. To preserve the function and mobility among elderly and ageing individuals, health practitioners should promote strategies such as maximizing function by decreasing pain, improving the ability to self-propel and prolonging mobility and endurance through ergonomics, individualized wheelchair selection and configuration, and adaptations for increasing the capacity to handle the daily mobility demands through training, strengthening, and exercise.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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