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Perception about community-based rehabilitation among the chronic stroke patients

Abstract

Background: Community based Rehabilitation for chronic stroke survivor is a new concept in Bangladesh. Thus, the perception of the service needs to be explored. The aim of the study is to explore the perception of people with chronic stroke about Community-based rehabilitation.

Methodology: This was a qualitative phenomenological study. A total of 8 chronic stroke survivors receiving CBR responded to the in-depth interview. Data was analyzed by thematic analysis.

Result: Seven categories have been emerged on perceived healthcare prior to stroke, knowledge about community-based rehabilitation, knowledge about physiotherapy, attachment to CBR workforce, benefits of CBR, rehabilitation impacts, and CBR applicability and acceptance. the themes were community care clients had an experience of a minimum healthcare facilities followed by their incidence of stroke, community care clients and their family or society has no idea about CBR, community care clients have insufficient knowledge about physiotherapy or rehabilitation, community care clients and their families have a close attachment with CBR workers, chronic stroke clients in the community are largely benefited by CBR program, rehabilitation impacts the chronic stroke clients personal and social life and community care clients accepts CBR as charity.

Conclusion: The Chronic Stroke patients receiving community-based rehabilitation near Dhaka city have a positive perception of the service. They somehow believe their burden can be resolved if the service continues yet don't believe they can integrate into the mainstream society.

Keywords: cbr, stroke, perception, Bangladesh

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Abbreviations

CBR, community based rehabilitation; WHO, world health organization; BSMMU, bangabandhu sheikh mujib medical university; BMRC, bangladesh medical research council; IRB, institutional review board; BHPI, bangladesh health professions institute; DALYs, disability-adjusted life years; CAHD, community approaches to handicap in development; CRP, centre for the rehabilitation of the paralysed

Introduction

About 15% of the world's population currently experience disability, which may be more than one billion people. Functioning is a significant problem for 110 to 190 million adults, among them. A global increase in chronic health conditions and aging are the causes of disability.[1]

Bangladesh is a South Asian nation, and it is viewed as one of the least created nations on the planet. Handicap is a significant social and affordable factor. One investigation discovered that 5.6% of the populace living in Bangladesh experiences some sort of handicap. Among individuals with inabilities, the level of various kinds is as per the following: 32.2% visual impedance, 27.8% actual handicap, 18.6% hearing weakness, 6.7% scholarly inability, 3.9% discourse impedance and 10.7% numerous handicaps. As of late the Bangladesh Bureau of Statistics assessed that the handicap rate was about 9.07 - 9.63% among individuals living in provincial zones and 7.49% living in metropolitan zones.[2]

Stroke rehabilitation administrations are offered in both inpatient and community-based locales. Inpatient care might be given in restoration communities, for example, units connected to intense clinics or nursing offices. Outpatient recovery administration can be given in emergency clinic based or autonomous facilities, in day emergency clinic setting or in the home.[3] Community-based rehabilitation (CBR) is an activity necessary for providing proper and prompt support to community-living disabled and elderly individuals.[4]

Community-based rehabilitation uses community resources and manpower to rehabilitate and integrated the disabled people in the community. CBR model cannot be applied in the same way in every country, so they should develop a unique way to provide.[5] I chose a qualitative research methodology to address this multilayered, but unknown phenomenon from the point of view of chronic stroke patients. This approach provided a different perspective about the problem of decline that may not be accessible by quantitative methods. This study will focus on the patient's perception that means what their views, thoughts, satisfaction, and expectations regarding CBR. Through this study the therapists can be concerned about the views of the patients and what they think about CBR whether they benefited or not. It is very important to know the perspective of stroke patients towards CBR.

Literature review

Community based rehabilitation (CBR) endeavors to upgrade personal satisfaction for people with handicaps and their families by expanding social investment and evening out circumstances in the

worldwide, mainly in the south Strengthening, a mainstay of CBR includes reinforcing the limit of individuals with incapacities, their families, and their networks to guarantee decrease of incongruities.[6]

As per the World Report on Disability, more than one billion, or around 10%–15%, of the total populace have some type of disability. People with disabilities regularly experience less fortunate wellbeing, less training and work openings, and are over-spoken to in more unfortunate nations.[7] CBR projects can encourage admittance to medical services for individuals with incapacities by working with essential medical care in the neighborhood network, giving the truly necessary connection between individuals with inabilities and the medical services framework. In numerous nations, e.g., Argentina, Indonesia, Mongolia and Vietnam, CBR programs are straightforwardly connected with the medical services framework but other nations, CBR programs are overseen by nongovernmental associations or other government services, e.g., social government assistance, and in these circumstances close contact should be kept up.[8]

The expressed prevalence of stroke in Bangladesh is 0.3%, albeit no realities on stroke commonness had been recorded.[9] Home physiotherapy had all the earmarks of being more convincing and more resource powerful than day specialist's office support. They suggested that home physiotherapy should be supported recuperation procedure for aftercare of stroke patients.[10] The WHO detailed that later stroke can be a reason for financial weight in Bangladesh. The circumstance is exacerbated that 30% of Bangladeshi are as of now answered to be living in destitution.[9]

More than one billion individuals experience incapacity which likens to around 15% of the total populace in Bangladesh. Among them 110 to 190 million grown-ups experience huge troubles in working. The quantity of individuals who experience incapacity will keep on expanding because of maturing populaces, and a worldwide expansion in persistent wellbeing conditions.[1]

Material and methods

The study was a Qualitative study with Phenomenological Method. The aim of this study was to explore the perception of persons with chronic stroke about Community-based rehabilitation. The study was conducted in the Narayanganj City, especially the community-based rehabilitation service that is being covered by The Centre for Palliative Care at Bangabandhu Sheikh Mujib Medical University (BSMMU) in Bangladesh. The study was concentrated on the chronic stroke survivor of the mentioned CBR Program. Chronic stroke patients were selected for this study conveniently, the community care service receiver who had stroke and matches inclusion criteria from the Centre for Palliative care at BSMMU Medical University. Diagnosed case of chronic stroke, at least 6 months after stroke. Woytowicz, et al. (2017) states the individuals having stroke and completed diagnosis at least 6 months of duration prior can be stated as chronic stroke. Then participants were selected purposively. Purposive sampling is based on pre-defined criteria. According to Devers & Frankel[11] – "Qualitative research most often uses purposive sampling rather than random sampling strategies. Total 15 persons matched. Interviewers started interviewing according to a predetermined list until data saturation. The data saturated after 8 interviews. Sampling was continued until data saturation; 8 respondents' interview was taken as sample. After the 8th respondent's interview, the researcher stopped data collection due to similar responses. here 8 data have been taken. Data collected through face-to-face interview by using semi-structured questionnaire. A face-to-face interview gave a better opportunity to build a good rapport with the participants and easily collect in-depth information from the participants.

Ethical considerations

The whole process of this research project has been done by following the national guidelines of Bangladesh Medical Research Council (BMRC) and World Health Organization (WHO) Research guidelines. A written approval from Institutional Review Board (IRB) of BHPI has been obtained. For data collection, a separate approval has been taken. During the data collection procedure- written consent has been taken from the patients. Every participant had to right to proceed or withdrawal from the study anytime.

Data analysis

The analysis of qualitative data has been performed through thematic analysis. Initially the complete interview has been typewritten and dictated. Then a separate expert started categorizing the interview into seven categories. The categories were-

Category 1: Perceived healthcare prior to Stroke

Category 2: Knowledge about Community Based Rehabilitation

Category 3: Knowledge about Physiotherapy

Category 4: Attachment to CBR workforce

Category 5: Benefit of CBR

Category 6: Rehabilitation Impacts

Category 7: CBR applicability and acceptance

Figure 1

From the categories seven themes have been developed. Later, researchers cross-examined the themes and categories with two separate experts and made necessary corrections. Also, a graphical presentation has been developed based on the themes.

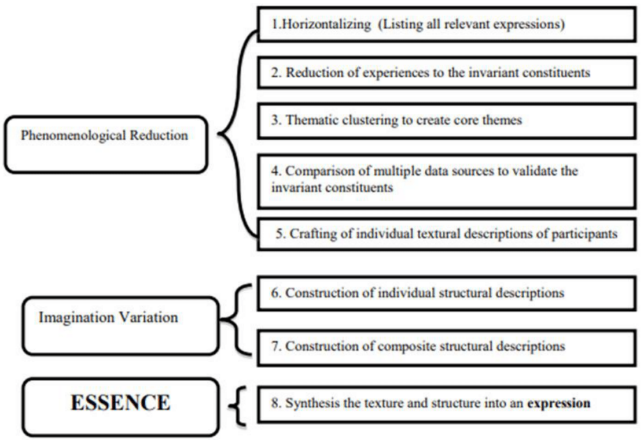

Figure 1 Stages of data analysis according to Mohajan (2018)

Results

Socio-demographic Status

The age of the respondents varies from 32 years to 65 years with a mean of 49.5±11.4 years. Patients age were 56 years, 43 years, 40

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years, 45 years, 62 years, 32 years, 53 years and 65 years. 04 of the respondents were male and 04 were female. 05 respondents were Illiterate, one had primary education and 02 had secondary education. Females were Housewife (04) and male were distributed to Labor (03) and overseas work (01). 07 respondents had Diabetes mellitus, 06 had Hypertension and all the respondents had multiple co-morbidities (08). 5 respondents had Ischemic stroke and 3 had a hemorrhagic stroke. Patient one stays with Daughter, subsequently other daughters stay with Daughter, son, son, spouse, daughter, spouse and patient 8 stays with spouse. Patient one is being taken care by Daughter and Care assistant, subsequently others has been taken care by daughter in law and Care assistant, Care assistant and spouse and Care assistant. The mean duration since stroke was 24±17.5 months. The mean of the monthly family income was 6712± 1180 BDT.

Discussion

The qualitative data is analyzed through thematic analysis.

Discussion on theme

Community Care Clients had an experience of Minimum Healthcare facilities followed by their incidence of Stroke.

Emerged from Category 1: perceived healthcare prior to Stroke.

Participant 1 stated "I worked in the garments after my husband's death, a sudden stroke spoiled all. I had some medicines from the pharmacy and later prescribed by the doctor. These are something I can remember."

Matin[12] states, in Bangladesh moreover, nervous system science preparing programs are just given in DMC and Bangabandhu Sheik Mujib Medical University and there are just 1300 technologists working 150 CT checks and 45 MRIs.

Community Care Clients and their family or society have no idea about CBR.

Emerged from Category 2: Knowledge about Community Based Rehabilitation

Participant 3 states "what can I say, I am in a huge problem, and I am illiterate."

Participant 6 states "Whatever you provide, if you wouldn't provide that at home, I could never access to hospital and take this service."

Alam, Bari and Khan[13] reported detail reasons of poverty, disability and community isolation and stated that, Government activities here are likewise deficient Because of neediness a considerable lot of the individuals with inabilities. Experts like physiotherapists and word related advisors are very few in the nation. Most of them can discover work in the large urban communities.

Community Care Clients have insufficient knowledge about Physiotherapy or Rehabilitation

Emerged from Category 3: Knowledge about Physiotherapy

Participant 2 stated "I was in the village and had no idea about exercise, my family members poured oil in my body, I have been taken to village spiritual practitioner (Kobiraj)". Participant 4 stated, "Therapy is the exercise instructed by doctors of therapy (Physiotherapist)" Mamin, et al.[14] states, the numbers identifying with stroke related passings and inability are incredibly high in agricultural nations. Universally, agricultural nations represent around 75% of stroke related passing and 81% of stroke related handicap changed life-years (DALYs).

Community Care Clients and their families have a close attachment with CBR workers.

Emerged from Category 4: Attachment to CBR workforce.

Participant 5 states, she (Community rehabilitation worker) comes and smiles at me. She then does exercises instructed by therapy doctors (Physiotherapists).

Chronic stroke clients in the community are largely benefited by CBR program.

Emerged from Category 5: Benefit of CBR

Participant 3 states "I could barely access these services". Participant 8 states "You are blessing to God".

Participant 5 states, "It would be better if the therapy doctors (Physiotherapist) would come regularly, but what you are doing that's enough".

Alam, Bari and Khan[13] stated, the fundamental exercises that enveloped CBR were refinement, treatment, essential restoration treatment, schooling, professional preparing and pay creating exercises.

Rehabilitation impacts the Chronic stroke clients Personal and social life.

Emerged from Category 6: Rehabilitation Impacts

Participant 2 stated, "I can move to bed", Participant 3 stated, "I was suffering for long years, I am confident I can walk someday."

Participant 7 stated, "I can eat and do my toilets myself, no one is avoiding me now."

The scope of exercises under CBR likewise expanded with physiotherapy, assistive gadgets being accessible, reference networks reinforced, and early identification and mediations programs being embraced. In 1996 the idea of Community Approaches to Handicap in Development (CAHD) advanced in the nation to execute Community Based Rehabilitation programs essentially through effectively settled improvement associations with multi-sectoral improvement programs.[13]

Community Care Clients accepts CBR as Charity

Emerged from Category 7: CBR applicability and acceptance.

Participant 2 states, "What you are doing is great, we are afraid when you will never be back".

Participant 7 states, "It would be better if we were ensured that we can find this type of support easily accessible anytime".

Figure 2

WHO[7] states, the drawback of rehabilitation is to think this is a charity. Yet it is needed to be considered as an essential service. Bowers[15] states rehabilitation in CBR is an effective process in Bangladesh. He stated, the progressions announced in ten out of fourteen result pointers give critical proof to the effect of CBR in this intercession. This examination used a thorough methodology and gave considerable proof to the effect of CBR. While these results can't be asserted as proof for all CBR mediations, they give solid signs on which to design future exploration and practice.[16]

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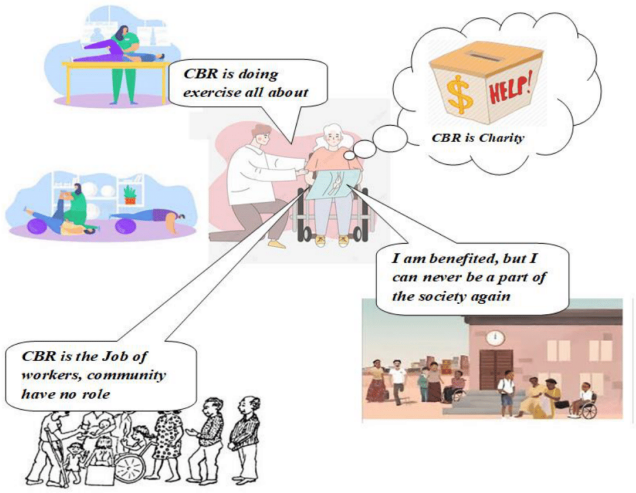

Figure 2 Graphical presentation of community care receiver's perception.

Conclusion

The Chronic Stroke patients receiving community-based rehabilitation near Dhaka city have a positive perception of the service. They are receiving the service as charity concept and acknowledged the positive impact of the service in their personal and family context. They somehow believe their burden can be resolved if the service continues. The study reflects that Community based rehabilitation in the city area are introduced as a "Care concept" with the sole responsibility is to the "Care givers". No community participation or family member's participation is noted during the services.

There was poor healthcare access for those respondents in the study; neither had they had a good referral towards rehabilitation professionals. The respondents are considering the services as "charity". They are closely bonded with the care workers, and they are largely benefited in the impairments in physical domains. Yet the people do not believe they can be re-integrated into society.

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Conflicts of interest

The authors declare that there are no conflicts of interest.

References

1. WHO. WHO global disability action plan 2014-2021: Better health for all people with disability. World Health Organization. 2015.
2. Moniruzzaman, Saha PC, Habib M. Community based rehabilitation: Does it really improve the level of productivity among persons with physical disabilities? *Work*. 2015;50(3):395–401.
3. Ottenbacher K, Jannell S. The results of clinical trials in stroke rehabilitation research. *Arc Neurol*. 2013;50(1):37–44.
4. Lopez JM, Lewis JA, Boldy DP. Evaluation of a Philippine community-based rehabilitation programme. *Asia Pac J Public Health.* 2000;12(2):85–89.
5. Lee HS, Chang JS, Kwon YH, et al. Awareness of community-based rehabilitation with a focus on public health centers. *Journal of Physical Therapy Science*. 2011;23(6):909–913.
6. Dagys KM, Popat A, Aldersey HM. The applicability of eLearning in community-based rehabilitation. *Societies*. 2015;5(4):831–854.
7. WHO. Noncommunicable diseases country profiles 2018. World Health Organization. 2018.
8. Saraceno B, van Ommeren M, Batniji R, et al. Barriers to improvement of mental health services in low-income and middle-income countries. *The Lancet*. 2007;370(9593):1164–1174.
9. Islam MN, Moniruzzaman M, Khalil MI, et. al. Burden of stroke in Bangladesh. *Int J Stroke*. 2013;8(3):211–213.
10. Knecht S, Hesse S, Oster P. Rehabilitation after stroke. *Dtsch Ärztebl Int.* 2011;108(36):600.
11. Devers KJ, Frankel RM. Study design in qualitative research--2: Sampling and data collection strategies. *Educ Health*. 2000;13(2):263–271.
12. Fahad BM, Matin A, Shill MC, et al. Antibiotic usage at a primary health care unit in Bangladesh. *Australasian Med J (Online)*. 2010;3(7):414.
13. Alam KJ, Bari N, Khan MA. Community based rehabilitation practices and alleviation of poverty of people with disabilities in Bangladesh. In Bangladesh Country Paper the National Forum of Organizations Working with the Disabled. 2015.
14. Mamin FA, Islam MS, Rumana FS, et al. Profile of stroke patients treated at a rehabilitation centre in Bangladesh. *BMC research notes*. 2017;10(1):520.
15. Bowers B, Kuipers P, Dorsett P. A 10-year literature review of the impact of community-based rehabilitation. *Disability, CBR & Inclusive Development*. 2015;26(2):104–119.
16. Mohajan HK. Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*. 2018;7(1):23–48.