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Assessment of Responsiveness of outpatient Services at a specialized hospital in Sri Lanka

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Abstract

Introduction: The responsiveness is how the health care system fulfills the needs of non-health expectations of the patients. This responsiveness is an important pillar to provide quality health care services to patients in a country. It is needs to continue measurement and assessment at outpatient department to provide high level services.

Method: A cross sectional study was conducted at Rheumatology Rehabilitation Hospital, Ragama in Sri Lanka. A simple random sampling method was applied for the patient survey. Eligible patients were randomly selected from the list prior to the clinic. This procedure was repeated on clinic days until the required sample size was met. An Interviewer-administered questionnaire (IAQ) and check list for qualitative data were used to assess the perceptions of the patients regarding the responsiveness.

Results: Overall responsiveness was rated at 61.2% by internal patients and 36.3% by external patients. The baseline assessment of responsiveness revealed significant gaps in communication, confidentiality, patient dignity, and the availability of basic amenities. Domains such as patient autonomy and the choice of care provider scored particularly low, reflecting systemic challenges within the government healthcare system. Limited access to information and lack of caretaker support were identified as critical areas for improvement.

Conclusion: Key gaps included poor communication skills, insufficient privacy during consultations, and poor physical infrastructure, such as a lack of accessible toilets and inadequate waiting areas. Patients and caregivers reported dissatisfaction with resource availability and the responsiveness of healthcare staff.

Keywords: Responsiveness; Outpatient; Services Rheumatology; Rehabilitation; Hospital; Sri Lanka

1 Introduction

"Better health is the key to human happiness and well-being. It also makes an important contribution to economic progress, as healthy people live longer, are more productive, and save more" [1]. At present patients are aware of medical conditions and treatment options through media especially electronic media. Because of their awareness, patients' expectations have increased. These developments had led, the health administrators to improve the quality of healthcare services provided by getting support from all health care professionals at each hierarchical level.

In Sri Lanka, the demand for comprehensive healthcare extends beyond traditional medical services, emphasizing the growing importance of rehabilitation care. As the nation continues to address health challenges and diverse medical

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conditions, the role of rehabilitation in enhancing the quality of life, promoting functional independence, and mitigating the societal impact of disabilities becomes increasingly paramount.

1.1 Background

WHO is identified three main goals for a health system of a country as:

- Improving the health of the population
- Improving responsiveness of the health system
- Fairness in financial contribution

Under fairness of financial contribution, it is expected that "costs for health are shared between the rich and poor while the rich contributing more and the poor receive benefits of subsidies [2].

1.2 Research Objective

1.2.1 General Objective

To assess the responsiveness of outpatient services provided to patients at the Rheumatology and Rehabilitation Hospital, Ragama.

1.2.2 Specific Objectives

- To design a framework to assess the responsiveness of outpatient services at the Rheumatology and Rehabilitation Hospital, Ragama.
- To evaluate the current level of responsiveness in outpatient services for patients treated at the Rheumatology and Rehabilitation Hospital, Ragama.
- To identify gaps and areas for improvement in the responsiveness of outpatient rehabilitation care at the Rheumatology and Rehabilitation Hospital, Ragama.

2 Methodology

2.1 Study Design

A cross-sectional descriptive study was performed.

2.2 Study Setting

The study was carried out at outpatients department in rehabilitation clinics at Rheumatology and Rehabilitation Hospital Ragama.

2.3 Inclusion criteria

Patients who have been attending to the Rheumatology and Rehabilitation Hospital (RRH) clinics for at least three months duration, ensuring that they have sufficient experience with the services provided.

2.4 Exclusion criteria

Patients who have been attending the clinic for the first time or those who coming for unplanned visits.

2.5 Sample size calculation

Charan and Biswas (2013) described a formula for sample size calculation for comparison between two groups when endpoint is qualitative [3]. The below-mentioned formula will be used when making comparisons between two groups, while the endpoint is qualitative.

N-Minimal sample size

If the study permits 5% types I error (α error),

$$\alpha = 0.05$$

$$\alpha/2 = 0.0250$$

According to Z table,

$$Z\,\alpha/2 = Z\,0.0250 = 1.96$$

If table the power of the study is defined as 80%, the ß error will be 20% (0.020)

Refer to the Z,

$$Z\,ß = Z\,0.020 = 0.842$$

PI- P2 is the "difference in the proportion of events in two groups"

P is the "pooled prevalence"

P = "Prevalence in case group (PI) + Prevalence in control group (P2)" 2

As there are no published similar research projects found at Rheumatology and Rehabilitation Hospital Ragama, Sri Lanka, it assumes that the baseline proportion of the event is 50%. The research project expects a 20% increase in the proportion of events (perception of patients) in the experimental group due to proposed interventions. The proportion of events in the control group stays to be the same with the time factor.

Hence,

$$P1 = 50\% = 0.50$$

$$P2 = 70\% = 0.70$$

$$P = \frac{0.50 + 0.70}{2} = 0.60$$

When applying the values in the formula (Charan and Biswas, 2013),

$$N = \frac{2\,(1.96+0.842)^2\,0.6\,(1-0.6)}{(0.5 - 0.7)^2} = 94$$

If a non-response rate of 10% is assumed,

$$N = \frac{94 \times 100}{90} = 105$$

Therefore, the sample size of patients per each group is 105.

2.6 Sampling method

A simple random sampling method was applied for the patient survey. The sampling frame was obtained from the clinic registration records for each clinic day. Eligible patients were randomly selected from the list prior to the clinic. The interviewer explained the study to the selected participants, and informed consent was obtained. The interviewer then administered the questionnaire to the participants in a confidential setting. This procedure was repeated on clinic days until the required sample size was met.

2.7 Data collection techniques and instruments

Both qualitative and quantitative research methods techniques were carried out during the three phases of the project. Following instruments were used to during the research.

2.8 Qualitative data collection

2.8.1 Direct Observation

Principal Investigator (PI) employed a checklist to systematically evaluate the responsiveness of the rehabilitation clinic through direct observation. This checklist was meticulously designed to capture detailed information about the clinic's operations, providing a structured framework for assessing key aspects of responsiveness.

The checklist was developed based on an extensive literature review and input from experts in the field. It focused on critical indicators of responsiveness, such as patient wait times, the availability of essential equipment, and the quality of interactions between staff and patients. Unlike other tools, the checklist was not translated into different languages, as the PI personally conducted the observations.

To ensure the tool's reliability and accuracy, both content and face validation were performed in collaboration with the supervisor. This validation process refined the checklist, enhancing the precision of the data collected.

The assessment employed a clear scoring system: items that met the predefined criteria were marked as "available." In certain instances, verbal inquiries were made to confirm the availability of specific resources or processes. This structured approach enabled a comprehensive evaluation of the clinic's responsiveness, providing valuable insights to guide future improvements in rehabilitation services.

2.8.2 Quantitative data collection

Questionnaires were employed to evaluate stakeholders' perceptions of responsiveness and An interviewer-administered questionnaire (IAQ) was used to gather patients' perspectives on the responsiveness of the rehabilitation clinics.

2.8.3 Administrative and ethical requirements

Administrative clearance was obtained from the Deputy Director RRH (Annexure) Permission was requested from relevant unit heads. The pretest of study instruments was conducted with the approval of the director CSTH - Kalubowila.

Ethical clearance for this study was obtained from the Ethics Review Committee (ERC) of the Post Graduate Institute of Medicine (PGIM), University of Colombo.

2.9 Data Collection

The process of data collection done utilizing various tools such as interviewer-administered questionnaires (IAQs) and check list.

2.10 Data Analysis

Data gathered during the pre-intervention phase were analyzed to assess the current status of the responsiveness of rehabilitation care for patients treated at Rheumatology and Rehabilitation Hospital Ragama.

3 Results

3.1 Socio-demographic data

The socio-demographic characteristics of the respondents indicate that the majority (36.2%) were aged 51-60 years, followed by 31.4% aged 61-70 years. Females constituted a higher proportion of the sample (68.6%) compared to males (31.4%). Most respondents identified as Buddhist (63.8%), with Sinhala being the predominant ethnicity (81.9%).

In terms of occupation, the largest group was unemployed individuals (39.0%), followed by housewives (18.1%) and those employed in the government and non-government sectors (14.3% each). Regarding education, 35.2% had studied up to GCE Ordinary Level (OL), and 31.4% had passed GCE OL, while 12.4% had never attended school.

Table 1 Sociodemographic data of the participants

Socio-demographic Characteristics	Number of respondents	Percentage of respondents
Age		
Less than 30	11	10.5%
41-50	11	10.5%
51-60	38	36.2%
61-70	33	31.4%
More than 70	12	11.4%
Sex		
Male	33	31.4%
Female	72	68.6%
Religion		
Buddhist	67	63.8%
Hindu	12	11.4%
Christian	18	17.1%
Islam	8	7.6%
Ethnicity		
Sinhala	86	81.9%
Tamil	11	10.5%
Muslim	8	7.6%
Position		
Schooling	1	1.0%
Employed - Government Sector	15	14.3%
Employed - Non-Government sector	15	14.3%
Unemployed	41	39.0%
Retired	3	2.9%
Housewife	19	18.1%
Other	11	10.5%
Education		
Never being to school	13	12.4%
Upto GCE OL	37	35.2%
GCE OL passed	33	31.4%
Other	22	21.0%
Marital Status		
Never Married	11	10.5%
Married	81	77.1%
Living together	1	1.0%
Widowed	12	11.4%
Spouse Occupation		
Unemployed	70	66.7%
Private sector Employee	27	25.7%
Self-employee	8	7.6%
Children		
No children	11	10.5%
one	1	1.0%
2-3 children	52	49.5%
4-5 children	29	27.6%
More than 5 children	12	11.4%
Income		
<30000	41	39.0%
30000-45000	38	36.2%
45000-60000	26	24.8%
Total	**105**	**100.0%**

The majority of respondents were married (77.1%), with a significant portion of their spouses being unemployed (66.7%). Nearly half of the respondents (49.5%) had 2-3 children, while 27.6% reported having 4-5 children. In terms of household income, 39.0% earned less than Rs. 30,000 per month, while 36.2% earned between Rs. 30,000-45,000. These results highlight a population primarily comprising older, married women, with moderate educational attainment, low employment rates, and modest income levels.

The data related to general information on illness, medical condition and care are presented in table

Table 2 General information on illness, medical condition and care

General information	Number of respondents	Percentage of respondents
Medical condition		
Rheumatological condition	50	47.6%
Post stroke	17	16.2%
Post-accident	27	25.7%
Congenital condition	11	10.5%
Living with		
Parents	11	10.5%
With Spouse	42	40.0%
With unmarried children	11	10.5%
With married children	41	39.0%
Care taker at home		
Immediate family members	105	100.0%
Distance to Hospital from residence		
6 to 10km	15	14.3%
11 to 20km	20	19.0%
More than 20km	70	66.7%
Time for travelling		
<15min	1	1.0%
30 - 59 min	15	14.3%
60 - 120 min	63	60.0%
>120 min	26	24.8%
Mode of travelling to Hospital		
By hired vehicle	55	52.4%
By Public Transport	50	47.6%
Cost for travelling		
<2000	35	33.3%
200-5000	14	13.3%
5000-10000	30	28.6%
>10000	26	24.8%
Total	105	100.0%

The analysis of general information on illness, medical condition, and care among respondents revealed that nearly half (47.6%) were diagnosed with rheumatological conditions, while 25.7% had post-accident conditions, and 16.2% were post-stroke patients. Most respondents lived with either a spouse (40.0%) or married children (39.0%), and all had immediate family members serving as caretakers at home.

Regarding access to care, 66.7% of respondents lived more than 20 km away from the hospital, with 60.0% spending 60-120 minutes traveling. A significant proportion (52.4%) used hired vehicles, while 47.6% relied on public transport. Travel costs varied, with 33.3% spending less than Rs. 2000, while 28.6% incurred Rs. 5000-10,000, and 24.8% exceeded Rs. 10,000. These findings highlight the challenges of distance, travel time, and costs faced by patients in accessing medical care.

3.2 Dignity

The domain 'dignity' was assessed using four items. Table display the results.

Table 3 Responsiveness in relation to Dignity

	Good N (%)	Average N (%)	Bad N (%)
Respect to the patient	0	50 (47.6%)	55 (52.4%)
Kindness while treating	17 (16.2%)	34 (32.4%)	54 (51.4%)
Respect to the privacy	0	50 (47.6%)	55 (52.4%)
Overall maintenance of Dignity	**0**	**30 (28.6%)**	**75(71.4%)**

The analysis of dignity-related aspects among respondents indicated that none rated respect toward patients or privacy as good, with 47.6% perceiving it as average and 52.4% as bad in both cases. Kindness during treatment was rated as good by 16.2%, average by 32.4%, and bad by 51.4%. Overall, the maintenance of dignity was rated as average by 28.6% and as bad by a majority (71.4%), highlighting significant shortcomings in ensuring patients feel respected and valued during their care.

3.3 Confidentiality

The domain 'confidentiality' also was assessed using four items. Table display the results.

Table 4 Responsiveness in relation to confidentiality

	Good N (%)	Average N (%)	Bad N (%)
Confidentiality of conversations	0	0	105 (100%)
confidentiality of information	0	10 (9.5%)	95 (90.5%)
confidentiality of medical records	0	0	105 (100%)
Overall confidentiality	**0**	**0**	**105 (100%)**

The assessment of confidentiality revealed significant inadequacies across all evaluated aspects. None of the respondents rated the confidentiality of conversations or medical records as good or average, with 100% categorizing these aspects as bad. Similarly, the confidentiality of information was rated as bad by 90.5% of respondents, while only 9.5% considered it average. Overall, confidentiality was rated as bad by all respondents (100%), indicating severe deficiencies in maintaining patient privacy and data security.

3.4 Autonomy

The domain 'autonomy' was assessed using six items. Table display the results.

Table 5 Responsiveness in relation to autonomy

	Often N (%)	Rarely N (%)	Not at all N (%)
Adequacy of information on diagnosis	10 (9.5%)	35 (33.3%)	60 (57.1%)
Adequacy of information on treatment options	10 (9.5%)	35 (33.3%)	60 (57.1%)
Consultation on patients preference on treatment options	0	35 (33.3%)	70 (66.7%)
Obtaining permission for treatment	25 (23.8%)	20 (19%)	60 (57.1%)
Patient involvement in deciding treatment options	0	45 (42.9%)	60 (57.1%)
Overall rate of being treated with autonomy	0	25 (23.8%)	80 (76.2%)

The assessment of autonomy highlighted significant deficiencies in patient-centered care. Only 9.5% of respondents reported often receiving adequate information about their diagnosis and treatment options, while 57.1% stated no information was provided. Additionally, 66.7% indicated their preferences were not consulted, and 57.1% were not asked for treatment permission. Patient involvement in treatment decisions was minimal, with 57.1% reporting no involvement and 42.9% indicating rare involvement. Overall, 76.2% felt they were not treated with autonomy

3.5 Communication

The domain 'communication' was assessed using five items. Table display the results.

Table 6 Responsiveness in relation to communication

	Often N (%)	Rarely N (%)	Not at all N (%)
Careful listening while talking	0	35 (66.7%)	35 (33.3%)
Explanation in understandable way	0	30 (28.6%)	75 (71.4%)
Provision of time for ask questions	0	0	105 (100%)
Verbal encouragement while feeling discomfort	0	0	105 (100%)
How good Effectiveness of overall communication?	0	10 (9.5%)	95 (90.5%)

The evaluation of communication revealed substantial shortcomings in the interaction between healthcare providers and patients. While 33.3% of respondents reported that careful listening occurred rarely, the remaining 66.7% indicated it did not occur at all. Furthermore, only 28.6% of respondents reported that explanations were provided in an understandable manner rarely, whereas 71.4% stated this did not happen at all. Notably, none of the respondents reported being given time to ask questions or receiving verbal encouragement during times of discomfort, as 100% indicated these aspects were completely absent. Overall, 90.5% of respondents rated the effectiveness of communication as poor, with only 9.5% perceiving it as average, highlighting the urgent need for improvements in communication practices.

3.6 Prompt attention

The domain 'Prompt attention' was assessed using ten items. Table display the results.

Table 7 Responsiveness in relation to prompt attention

	Often N (%)	Rarely N (%)	Not at all N (%)
Time of the day	50 (47.6%)	55 (52.4%)	0
Day of week	45 (42.9%)	60 (57.1%)	0
Time spent to travel	0	15 (14.3%)	90 (85.7%)
Waiting time for date for first visit	40 (38.1%)	50 (47.6%)	15 (14.3%)
Waiting time for registration	15 (14.3%)	90 (85.7%)	0
Waiting time for consultation	15 (14.3%)	45 (42.9%)	45 (42.9%)
Waiting time for lab test	0	65 (61.9%)	40 (38.1%)
Waiting time for lab results	0	35 (33.3%)	70 (66.7%)
Waiting time for drugs	0	50 (47.6%)	55 (52.4%)
Total time for service	0	75 (71.4%)	30 (28.6%)
Prompt attention	0	80 (76.2%)	25 (23.8%)

The analysis of prompt attention revealed significant delays in service delivery. While 47.6% found services timely based on the time of day, 52.4% reported delays. Similarly, 42.9% noted prompt attention based on the day of the week, but 57.1% reported rare occurrences. Travel times were a major challenge, with 85.7% taking over an hour. Waiting times for the first visit were acceptable for 38.1%, though 14.3% faced significant delays.

Extended waiting times were reported for registration (85.7%) and consultations, where 42.9% experienced prolonged delays. Lab tests and results saw moderate delays for 61.9% and 33.3%, while 38.1% and 66.7% faced significant delays, respectively. Drug collection delays were noted by 52.4%. Overall, 71.4% found total service time excessive, with 76.2% rating prompt attention as rare and 23.8% indicating it was entirely absent, highlighting the need for efficiency improvements.

3.7 Choice of care provider

The domain 'Choice of care provider 'was assessed using five items. Table display the results.

Table 8 Responsiveness in relation to Choice of care provider

	Good N (%)	Average N (%)	Bad N (%)
Ability to choose the specialist	0	0	105 (100%)
Ability to choose the hospital	0	0	105 (100%)
Ability to see a specialist	0	10 (9.5%)	95 (90.5%)
Ability to change specialist within clinic	0	0	105 (100%)
Choice of care provider	0	10 (9.5%)	95 (90.5%)

The assessment of the choice of care provider indicates significant limitations in this domain. All respondents (100%) reported that they had no choice between providers, hospitals, or the ability to change providers within the clinic, reflecting a complete lack of flexibility in these aspects of care. Regarding the ability to see a specialist, only 9.5% rated it as average, while the majority (90.5%) rated it as poor. Similarly, the overall evaluation of the choice of care provider was rated as average by 9.5%, with the remaining 90.5% perceiving it as inadequate. These findings highlight substantial deficiencies in patient autonomy and access to preferred care options, underscoring the need for reforms to enhance patient-centered care.

3.8 Basic amenities

The domain 'Basic amenities' was assessed using eight items. Table display the results.

Table 9 Responsiveness in relation to Basic amenities

	Good N (%)	Average N (%)	Bad N (%)
General cleanliness	0	30 (28.6%)	75 (71.4%)
Spacing	15 (14.3%)	65 (61.9%)	25 (23.8%)
Ventilation	30 (28.6%)	75 (71.4%)	0
Seating facilities	0	40 (38.1%)	65 (61.9%)
Drinking water	0	0	105 (100%)
Toilet facilities	0	0	105 (100%)
Examination facilities	0	35 (33.3%)	70 (66.7%)
Basic amenities	0	0	105 (100%)

The evaluation of basic amenities reveals widespread dissatisfaction among respondents. General cleanliness was rated as average by 28.6% of respondents, while 71.4% rated it as poor. Spacing was considered good by 14.3%, average by 61.9%, and poor by 23.8%. Ventilation was assessed more favorably, with 28.6% rating it as good and 71.4% as average, with no poor ratings. However, seating facilities were rated as average by 38.1% and poor by 61.9%. Drinking water and toilet facilities were universally rated as poor (100%), reflecting critical inadequacies in these areas. Examination facilities were rated as average by 33.3% of respondents and poor by 66.7%. Overall, basic amenities were rated as poor by all respondents (100%), emphasizing a significant gap in the provision of essential infrastructure and facilities.

3.9 Social Support

The domain 'Social support' was assessed using a single item. Table display the results.

Table 10 Responsiveness in relation to social support

	Good N (%)	Average N (%)	Bad N (%)
Opportunity to be accompanied by friends or relatives	0	11 (10.5%)	94 (89.5%)

The assessment of social support indicates significant limitations in the opportunity for patients to be accompanied by friends or relatives during their care. Only 10.5% of respondents rated this aspect as average, while the majority, 89.5%, rated it as poor. No respondents rated this aspect as good, highlighting a substantial deficit in the provision of social support mechanisms within the care setting.

3.9.1 Overall rating of responsiveness by the external customers

Table 11 Overall rating of responsiveness by external customers

	No of questions	**Marks**	Mean score	**SD**	**%**
Dignity	4	20	9.7	2.1	48.7%
Confidentiality	4	20	4.9	2.8	24.5%
Autonomy	6	30	10.3	6.6	34.4%
Communication	5	25	5.8	4.5	23.2%
Prompt Attention	11	55	28.6	2.8	51.9%
Choice of care provider	5	25	2.0	6.0	8.0%
Quality of Basic Amenities	8	40	16.3	3.3	40.8%
Social support	1	5	2.1	0.3	42.1%
Overall	**44**	**220.0**	**79.8**	**2.7**	**36.3%**

The overall rating of responsiveness based on the IAQ-pre assessment reveals moderate to low performance across various domains. Dignity achieved a mean score of 9.7 out of 20, reflecting a performance level of 48.7%. Confidentiality scored significantly lower, with a mean of 4.9 out of 20, corresponding to only 24.5%. Autonomy showed a modest performance, with a mean score of 10.3 out of 30 (34.4%), while communication was one of the least satisfactory domains, with a mean score of 5.8 out of 25 (23.2%). Prompt attention had a relatively better outcome, with a mean score of 28.6 out of 55, indicating 51.9% performance. However, the choice of care provider was notably poor, scoring only 2.0 out of 25 (8.0%). The quality of basic amenities had a moderate score of 16.3 out of 40 (40.8%), and social support reached 42.1% with a mean of 2.1 out of 5. Overall, the total mean score across all domains was 79.8 out of 220, resulting in a responsiveness level of 36.3%, indicating substantial room for improvement in the care experience.

3.9.2 Direct observational summary results gathered via checklists

The results of the checklist in pre intervention phase

Table 12 Human resources available in the Clinic

Human resources available	**Number**	**Number per shift**	**Comments**
Number of consultants	3	2	Adequate
Number of medical officers	10	6	Adequate
Number of nurses	14	8	Adequate
Number of physiotherapists	10	6	Adequate
Number of occupational therapists	9	5	Adequate
Number of minor staff employees	10	8	Adequate
Number of cleaning staff employees	2	2	Not adequate

Table 13 Physical resources available

Physical resources available	Number	Comments
Number of examination beds available	5	Not adequate
Number of toilets available	4	Only two in functional state
Are the toilets flushable with running water	Yes	-
Availability area of separate examination	yes	Space is not adequate
Is examination area covered with screen or walls	yes	Not all the beds are covered
Availability of separate dining area	No	Must needed facility
Are sinks available to wash hands in the dining area	Yes	-
Availability of a religious area	Yes	-
Availability of a suggestion book/box	Yes	Doesn't have proper feedback mechanism
Availability of a stretcher /Trolley	Yes	-
Availability of a stretcher cushioned	No	Must needed one
Availability of a wheelchair	Yes	-
Availability of a wheelchair cushioned	Yes	-
Availability of fans	Yes	-
Availability of safe drinking water	Yes	Only one dispenser is available
Toilets are lit	Yes	-
Availability of dust bins	Yes	Not in adequate number

Table 14 Assessing cleanliness

Assessing cleanliness	Number of times	Comments
frequency of cleaning the toilets	2times/day	Not enough
Frequency Of changing the bed linen	Weekly	Not adequate
Frequency of cleaning the dust bins	Daily	Once daily is not enough
Frequency of cleaning the ward floor	Daily	-
Availability of dust bins for collection of segregated waste	yes	-

Table 15 Other facilities

Facility	Yes	No	Comments
Availability of patient information material	yes	-	Not in an organized set up
Availability of a television	-	No	Must needed one for health promotion
Facility	Yes	No	Comments
Availability of patient information material	Yes	-	Not in an organized set up
Availability of a television	-	No	Must needed one for health promotion

4 Discussion

The pre-intervention analysis identified several critical gaps in rehabilitation care, particularly in areas such as patient involvement, caregiver preparedness, and communication quality within the system. These findings resonate with existing studies on healthcare responsiveness, including the work of [4] which highlighted communication barriers as a significant hindrance to patient satisfaction in rehabilitation services. Literature clearly underscore the importance of enhancing patient engagement, particularly in aspects of participation and understanding, to improve care outcomes [5].

In this study, overall responsiveness was rated at 61.2% by internal customers and 36.3% by external customers, which is notably lower than figures reported in previous local studies. For instance [6]found responsiveness levels of 83.4% in family planning services in Colombo's MOH divisions, while Attanayake (2014) reported 82.5% in inpatient services at a base hospital [6],[7]. The discrepancies observed could be attributed to differences in settings, with specialized hospitals such as rehabilitation centers potentially facing unique challenges compared to other healthcare environments. Nevertheless, when compared to international studies, the responsiveness rating of 36.3% in this study fares better than the 20.9% recorded in a study of rehabilitation centers in Tehran [8].

Baseline data collected during the initial assessment revealed deficiencies in critical areas such as the choice of care provider, attention to physical needs, communication with relatives, and basic amenities like washrooms and drinking water. Among these, the "choice of care provider" was rated as low as 8%, followed by communication at 23.2%, and confidentiality at 24.5%. The limited ability to select care providers is inherent in the structure of Sri Lanka's government healthcare system, where patients are admitted to wards based on admission roster rather than preference and subsequently referred to clinics. This structural limitation makes the "choice of care provider" beyond the patient's control.

Similarly, gaps in communication strategies were highlighted in the qualitative analysis, echoing findings from other studies on healthcare responsiveness, particularly in resource-constrained settings.

This study further aligns with the work of Gunnhild Berdal and colleagues[9], who explored the importance of bridging gaps in healthcare services across multiple levels, particularly in rehabilitation settings. Their findings highlighted the need for effective communication, well-integrated care pathways, and enhanced caregiver support to ensure the successful rehabilitation of patients with musculoskeletal and rheumatic conditions [10]. These insights reinforce the importance of addressing systemic challenges in continuity and collaboration within rehabilitation care.

5 Conclusion

In the pre intervention phase, following instruments were developed to assess the responsiveness in RRH Ragama- IAQ and checklist for direct observation. Overall responsiveness was rated at 61.2% by internal customers and 36.3% by external customers. The baseline assessment of responsiveness revealed significant gaps in communication, confidentiality, patient dignity, and the availability of basic amenities. Domains such as patient autonomy and the choice of care provider scored particularly low, reflecting systemic challenges within the government healthcare system. Limited access to information and lack of caretaker support were identified as critical areas for improvement.

Key gaps included poor communication skills, insufficient privacy during consultations, and poor physical infrastructure, such as a lack of accessible toilets and inadequate waiting areas. Patients and caregivers reported dissatisfaction with resource availability and the responsiveness of healthcare staff.

Recommendation

It is recommended to expand training programs for staff and caregivers by scaling up training initiatives on responsiveness, including communication skills, confidentiality, and patient-centered care, across other government healthcare facilities. Incorporating refresher courses and follow-up sessions will help ensure the long-term retention of these skills.

It is vital to ensure adequate funding and capacity-building opportunities for healthcare staff and community workers to effectively deliver CBR services. This would increase the workforce's ability to meet the growing demands for rehabilitation services and contribute to improved patient outcomes.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual who participated

References

[1] Preker, A.S., Carrin, G., Dror, D., Jakab, M., Hsiao, W. and Arhin-Tenkorang, D., 2004. Rich-poor differences in health care financing. Health Financing for Poor People–Resource Mobilization and Risk Sharing, pp.3-52.

[2] World Health Organization (2000) 'WORLD HEALTH ORGANIZATION FIFTY-THIRD WORLD HEALTH ASSEMBLY A53/4 Provisional agenda item 3 The world health report 2000 MESSAGE FROM THE DIRECTOR-GENERAL', (March), p. 3.

[3] Charan, J. and Biswas, T. (2013) 'How to calculate sample size for different study designs in medical research?', Indian journal of psychological medicine, 35(2), pp. 121–126. Available at: https://doi.org/10.4103/0253-7176.116232.

[4] Gheshlagh RG, Nemati SM, Negarandeh R, Bahramnezhad F, Saqqezi PS, Mahmoodi H. Identifying communication barriers between nurses and patients from the perspective of Iranian nurses: a Q-methodology-based study. BMC nursing. 2024 Jul 5;23(1):458.

[5] Marzban S, Najafi M, Agolli A, Ashrafi E. Impact of patient engagement on healthcare quality: a scoping review. Journal of patient experience. 2022 Sep; 9:23743735221125439.

[6] Perera WL, Mwanri L, de A Seneviratne R, Fernando T. Health systems responsiveness and its correlates: evidence from family planning service provision in Sri Lanka. WHO South-East Asia Journal of Public Health. 2012 Oct 1;1(4):457-66.

[7] Berdal G, Kjeken I, Linge AD, Aasvold AM, Tennebø K, Eppeland SG, Hagland AS, Ohldieck-Fredheim G, Valaas HL, Bø I, Klokkeide Å. Examining the Building Blocks of Health Behavior Change in Rheumatology Rehabilitation: A Theory-Driven Qualitative Study. Journal of Multidisciplinary Healthcare. 2024 Dec 31:3649-62.

[8] Fentanew M, Yitayal MM, Chala KN, Kassa T. Magnitude of satisfaction and associated factors among caregivers of children with disabilities towards community-based rehabilitation service in central and north Gondar zone, Northwest Ethiopia: A community-based cross-sectional study. Journal of Multidisciplinary Healthcare. 2021 Sep 16:2565-75