

Challenges and Opportunities in Cognitive Rehabilitation Services: Perspectives from Rehabilitation Professionals

Xuelian Jiang^{1*}, Chengyang Wan², Yan Chen¹

¹Nursing Department, TaiHe Hospital, Hubei University of Medicine, Shiyan, China

²Neurological Rehabilitation Center, TaiHe Hospital, Hubei University of Medicine, Shiyan, China

*Corresponding author: Xuelian Jiang, 527530264@qq.com

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Abstract: *Objective:* This study aims to explore the facilitating and hindering factors faced by rehabilitation professionals in providing cognitive rehabilitation services for patients with Post-Stroke Cognitive Impairment (PSCI) in China, offering empirical evidence for optimizing service models. *Methods:* Using purposive sampling, semi-structured interviews were conducted with 15 rehabilitation professionals from three tertiary hospitals and two community health service centers in Hubei Province from September to November 2023. Audio recordings were transcribed to obtain textual data, which were analyzed using Nvivo 12 software for coding. An inductive thematic analysis approach was employed to distill key themes. *Results:* The study identified multiple facilitating and hindering factors related to cognitive rehabilitation, summarizing them into four core themes and eight sub-themes: (1) Cognitive Screening: Presence of practical barriers and inadequate professional knowledge, which limited early detection and effective intervention for cognitive impairments; (2) Individualized Rehabilitation: Lack of patient-directed personalized interventions and multidisciplinary team collaboration, affecting patient engagement and rehabilitation outcomes; (3) Lack of Psychological Rehabilitation: The necessity of psychological interventions was emphasized, yet there is a significant scarcity of neuropsychological resources, limiting the implementation of psychological support; (4) Challenges of Community Continuity in Rehabilitation: Severe service discontinuity, with community healthcare institutions facing shortages of professional knowledge and equipment, resulting in patients being unable to receive continuous and effective rehabilitation support after discharge. *Conclusion:* Current PSCI rehabilitation services face issues such as insufficient staffing, ineffective multidisciplinary team collaboration, and a lack of community resources. Enhancing neuropsychological resources, establishing standardized MDT collaboration processes, and creating a referral system linking hospitals, communities, and families are essential to improve primary care capacity and enhance rehabilitation outcomes for patients.

Keywords: Barriers and facilitators; Community-based services; Cognitive rehabilitation; Post-stroke cognitive impairment; Psychological support

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1. Introduction

Post-Stroke Cognitive Impairment (PSCI) is a complex condition that is commonly observed among stroke patients, directly impacting cognitive function, independence, and quality of life ^[1]. Research by Weterings *et al.* indicates a comorbidity rate of 44% for cognitive impairment in younger stroke populations ^[2]. In China, approximately one-third of stroke patients aged over 40 experience varying degrees of cognitive impairment ^[3]. This phenomenon is not limited to the early stages following the stroke; many patients may report ongoing cognitive decline within a year post-stroke ^[4]. PSCI can restrict patients' daily living activities, subsequently affecting their social engagement and self-care abilities, significantly increasing the demand for care and imposing a substantial economic burden on families and society ^[5-7].

Despite significant increases in attention to PSCI in recent years, several important challenges persist. First, there is a lack of consistency in the screening and diagnosis of PSCI, leading clinicians to be unable to effectively assess patients at the optimal time. Although current guidelines recommend timely screening, assessment, and rehabilitation for stroke patients to enhance quality of life, the number of institutions executing these recommendations remains limited, particularly in primary care settings where relevant resources and expertise are often lacking ^[8]. This inadequacy hinders early identification and intervention. Secondly, existing rehabilitation models frequently fail to adequately address the individualized needs of patients. Research shows that cognitive abilities among PSCI patients exhibit considerable heterogeneity, and standard rehabilitation protocols do not meet the specific needs of all patients ^[9]. Moreover, a lack of coordination among interdisciplinary teams often poses barriers for patients seeking psychological and speech therapy support ^[10]. These factors contribute to insufficient support during patients' post-discharge rehabilitation processes, adversely affecting their long-term recovery and quality of life ^[11].

In this context, a thorough examination of rehabilitation professionals' experiences in providing cognitive rehabilitation services for PSCI is of significant theoretical and practical importance. This study aims to qualitatively analyze the challenges and opportunities encountered by rehabilitation professionals in their service delivery, providing empirical evidence for improving and optimizing post-stroke cognitive rehabilitation services. The research aims not only to enhance service efficiency and quality in primary healthcare institutions but also to offer robust data support for policymakers, thereby advancing the field of cognitive rehabilitation following stroke.

2. Research subjects and methods

2.1. Research subjects

This study selected stroke rehabilitation professionals from three tertiary hospitals and two community health service centers in Hubei Province between September and November 2024, employing purposive sampling to conduct semi-structured interviews. Inclusion criteria were as follows: participants must possess a nationally recognized qualification in rehabilitation medicine and have at least three years of experience in providing rehabilitation services for stroke patients; they must also voluntarily participate and sign an informed consent form.

Exclusion criteria included individuals unable to participate in interviews throughout the study due to full-time learning or training commitments, as well as those who refused to participate or could not accurately express their personal views. Ultimately, 15 qualified rehabilitation professionals were included in the study, identified as N1–N15. The sample size was determined based on qualitative research demands for richness and diversity, taking

into account participants' professional backgrounds and experiences.

2.2. Research methods

2.2.1. Development of basic information form and interview outline

Grounded in a constructivist theoretical framework, this study utilized qualitative descriptive methods to systematically explore the facilitating factors and obstacles in cognitive rehabilitation from the perspective of rehabilitation professionals. The research team designed a Basic Information Collection Form for Rehabilitation Professionals, which encompassed multiple demographic variables, including gender, age, education level, and professional technical title to consider the impact of demographic characteristics in the analysis.

The development of the interview outline was guided by a systematic literature review and consultations with multidisciplinary experts to ensure coverage of key areas in cognitive rehabilitation. The main topics of the interview outline included: "Can you describe the regular rehabilitation services provided to stroke patients?"; "What principles or processes do you follow when formulating rehabilitation service plans for stroke patients?"; "Is cognitive rehabilitation included in the rehabilitation service plans of your institution?"; "What is the specific process for conducting cognitive screening for stroke patients in your daily work?"

2.2.2. Data collection methods

This study employed a phenomenological approach, collecting data through semi-structured in-depth interviews with 15 rehabilitation professionals. Prior to the interviews, each participant was contacted by phone to communicate the research objectives and ethical guidelines, ensuring they fully understood the nature and significance of the study. Participants then signed informed consent forms and negotiated the time and location for the interviews. All interviews were recorded and transcribed verbatim within 24 hours to ensure timeliness and accuracy. The textual data were verified by two team members and anonymized (N1–N15) to protect participant privacy, and the transcribed texts were imported into NVivo 12.0 software for coding and theme extraction.

2.2.3. Data organization and quality control

Interview recordings were transcribed into verbatim texts within 24 hours, and Colaizzi's phenomenological analysis method was employed for data organization. The transcriptions underwent cross-verification by team members to ensure accuracy. To enhance the credibility of the study, feedback was provided to participants via email to verify the authenticity of the results, ultimately distilling four main themes and eight sub-themes to ensure the validity and reliability of the findings.

2.3. Ethical review

This study received approval from the Ethics Committee of Taihe Hospital in Shiyan City (Approval No. 2023XM008) and strictly adhered to the requirements of the "Ethical Review Measures for Biomedical Research Involving Humans" and the principles of the Declaration of Helsinki, ensuring the principle of voluntary participation. Respondents were clearly informed that they could withdraw from the study at any time without facing any adverse consequences, and all participants signed informed consent forms. This adherence to ethical principles ensured the fairness of the research and protected participants' rights.

Through interviews with 15 stroke rehabilitation professionals, this study refined four primary themes: "Cognitive Screening," "Individualized Rehabilitation," "Lack of Psychological Rehabilitation," and "Challenges

of Community Rehabilitation Continuity.”

3. Results

3.1. Basic information

A total of 15 stroke rehabilitation professionals were interviewed in this study, with an average age of 59.00 years (± 11.35). The average duration of the interviews was 35 minutes (± 5.45). The respondents included various professionals from three tertiary hospitals and two community health institutions, representing a range of positions and titles. Detailed basic information is presented in **Table 1**.

Table 1. General information of interviewees

ID	Age	Experience (years)	Education	Position	Title	Institution
N1	45	11	Doctorate	Director	Chief physician	Tertiary Hospital
N2	38	13	Master's	None	Associate chief physician	Tertiary Hospital
N3	42	15	Master's	Chief Technician	Deputy chief technician	Tertiary Hospital
N4	29	4	Bachelor's	None	Head nurse	Community
N5	33	6	Master's	None	Attending physician	Tertiary Hospital
N6	29	3	Bachelor's	None	Nurse	Community
N7	52	27	Bachelor's	Nurse Manager	Chief nurse	Tertiary Hospital
N8	42	15	Master's	Chief Technician	Deputy chief technician	Tertiary Hospital
N9	36	8	Master's	None	Supervisor therapist	Tertiary Hospital
N10	26	3	Bachelor's	None	Nurse	Tertiary Hospital
N11	29	3	Bachelor's	None	Nurse	Tertiary Hospital
N12	32	5	Bachelor's	None	Nurse	Community
N13	37	8	Bachelor's	None	Therapist	Community
N14	46	15	Master's	Director	Chief physician	Community
N15	44	12	Bachelor's	Nurse manager	Deputy chief nurse	Community

3.1.1. Theme 1: Cognitive screening

Respondents widely acknowledge the significance of cognitive screening in post-stroke rehabilitation but point out multiple barriers, such as a lack of standardization and insufficient resources. These factors significantly impact the early identification of cognitive impairments and subsequent interventions.

(1) Barriers in practice

Participants emphasized that although some medical institutions have established cognitive screening mechanisms, they still face numerous challenges during implementation. N1 remarked, “Current screening tools exhibit significant limitations in specific patient populations, such as those with communication difficulties or low educational levels.” This perspective highlights the adaptability issues of existing screening tools, indicating a need for adjustments and improvements tailored to the unique needs of different patient groups.

N2 further pointed out, “The current healthcare system has not yet established a specialized human

resource allocation mechanism for screening cognitive impairment after a stroke. For the stroke patient population, there remains a lack of standardized clinical pathways capable of comprehensive evaluation and intervention management.” This underscores the urgent need to enhance human resource allocation and professional capacity building within the post-stroke rehabilitation system. N3 noted the heterogeneity of existing screening tools: “There are specific differences in the applicable populations and assessment dimensions across various scales, and this non-standardized state constitutes a significant constraint on screening efficacy.” This reflects the absence of unified standards among different tools, which may compromise the reliability and effectiveness of screening results. N8 introduced the importance of multidimensional assessment, stating, “While standardized cognitive screening scales form the foundational tools, our institution employs an integrative assessment framework that includes executive function evaluations, structured behavioral observations, and informer interviews.” This indicates that relying solely on individual tools is increasingly inadequate for meeting the comprehensive evaluation demands in clinical practice.

(2) Insufficient professional knowledge

Participants universally emphasized that the process of assessing cognitive impairment requires a diverse range of professional knowledge. N1 noted, “Cognitive screening is part of the primary screening process, and its results do not have diagnostic validity. However, the rehabilitation team tends to overly rely on quantitative indicators in clinical decision-making, which can reduce diagnostic specificity due to the reliance on unidimensional screening data.” This perspective underscores the potential limitations of quantitative data in the decision-making process and suggests that the rehabilitation team needs to strengthen their capabilities for multifaceted assessment.

N2 also highlighted the risks associated with the lack of competency among professionals: “Clinical psychologists need to be vigilant; deficiencies in neuropsychological competence can lead to three clinical risks: biased assessment validity, decreased effectiveness in clinician-patient communication, and reduced accuracy in intervention plans.” This further reflects the complexities involved in the rehabilitation process, particularly regarding communication with patients and analyzing their needs. N10 shared an example concerning family support: “In community rehabilitation practice, a typical case where a positive screening result led to the collapse of the family support network is encountered, highlighting flaws in the allocation of neuropsychological assessment resources at the grassroots level.” This case emphasizes the importance of professional resource allocation and the negative consequences resulting from its inadequacy. N13 warned, “In the treatment team, inexperienced therapists may label patients with cognitive impairments based solely on screening results.” This emphasizes the need for caution in the diagnostic and treatment processes to avoid misjudging patients due to the limitations of the data.

3.1.2. Theme 2: Individualized rehabilitation

Individualized rehabilitation plans and interdisciplinary team collaboration are considered essential for implementing effective cognitive rehabilitation. Respondents generally agreed that personalized intervention measures should be developed based on the specific circumstances of different patients.

(1) Patient needs-oriented personalized interventions

N1 highlighted, “The extent of cognitive impairment after a stroke varies; personalized cognitive rehabilitation plans should be based on each patient’s needs and rehabilitation goals.” This viewpoint

reflects the importance of considering individual differences in medical practice, emphasizing that not all patients can be treated the same way. N2 further stressed, “The resources for existing cognitive impairment rehabilitation services are limited. I can only do my best to provide some interventions and attempt various strategies.” This illustrates the challenges and efforts of rehabilitation professionals working under resource constraints. N5 shared insights about two patients’ treatment situations: “One patient has significant difficulties in information processing, which affects memory function, while the other is in a more severe condition, having almost lost their memory ability. This indicates that no two stroke patients are the same, and we need to conduct targeted cognitive rehabilitation services.” This case analysis underscores the importance of individualized treatment. N14 added, “In the absence of evidence-based guidelines, I believe rehabilitation therapists need to establish a systematic approach to cognitive impairment rehabilitation interventions to address the rehabilitation needs of different cognitive impairment groups.” This call highlights the importance of developing personalized intervention plans based on scientific evidence.

(2) Multidisciplinary team collaboration to promote patient engagement

Most respondents unanimously agreed that the establishment and effective operation of a multidisciplinary team (MDT) can enhance the quality of cognitive rehabilitation. N1 stated, “All members of the stroke rehabilitation team share the responsibility of ensuring patient engagement in rehabilitation. Coordinators should facilitate communication among various parties to ensure the effective implementation of cognitive rehabilitation.” This highlights the significance of teamwork in promoting patient recovery.

N7 emphasized, “Our department is the best at implementing MDT, allowing us to collaborate closely with doctors, therapists, nutritionists, and psychotherapists in professional group activities. We conduct regular communication regarding patient participation.” Such team collaboration ensures that patients receive support and assistance at all stages of rehabilitation. N8 underscored the importance of patient involvement: “Improving patients’ cognitive abilities can be included as part of rehabilitation goals, but the lack of these abilities often becomes a barrier to their recovery. We often feel powerless when dealing with patients who lack family support.” This statement reveals the necessity of family support in the rehabilitation process. N9 pointed out the challenges in the rehabilitation process: “Cognitive rehabilitation is a lengthy process, and family members often lack patience. Additionally, some family circumstances do not allow patients to continue rehabilitation treatment in the hospital.” This perspective reflects the complex realities that patients and their families face on the road to recovery.

3.1.3. Theme 3: Lack of psychological rehabilitation

Insufficient psychological support is viewed as a significant factor affecting the effectiveness of cognitive rehabilitation after a stroke. Respondents generally believe that a lack of psychological resources limits recovery opportunities for patients.

(1) Necessity of psychological support

Despite policy recommendations to introduce clinical psychologists, respondents noted that the availability of psychological services remains extremely limited. N2 stated, “We do not have clinical psychotherapists, which is clearly a major deficiency in most hospitals.” This reflects the current healthcare system’s shortcomings in providing mental health services.

N8 mentioned, “We cannot separate the psychological factors associated with stroke from the

cognitive, physiological, and emotional conditions. To understand these, I often invest time in studying psychology.” This underscores the close relationship between psychological support and overall patient health. N12 further pointed out, “I believe the high incidence of cognitive impairments, anxiety, and depression after a stroke must receive psychological support at the societal, hospital, and family levels.” This perspective offers a broader view for various sectors in the rehabilitation support process. N15 suggested, “Providing vocational interventions and psychological support at different stages of patient rehabilitation is essential to ensure their smooth and safe return to the workplace.” This viewpoint emphasizes the critical role of psychological support in the process of returning to work.

(2) Shortage of neuropsychological resources

Respondents commonly reflected that the lack of neuropsychologists limits patients’ opportunities to receive necessary assessments. N1 noted, “There are very few formally trained neuropsychologists in the country. Our team usually refers patients experiencing psychological issues, but there often aren’t specialists available for follow-up support.” This situation highlights the vulnerability of the medical team in addressing mental health issues.

N2 added, “If we had more expert resources, we would be able to provide patients with routine cognitive and psychological assessments and relay the results back to the community neurorehabilitation team as a foundation for cognitive rehabilitation.” This emphasizes the importance of enhancing the psychological health expertise within the team.

3.1.4. Theme 4: Challenges of continuity in community rehabilitation

The role of community healthcare institutions in stroke rehabilitation has not been fully realized. The issues of service shortages and a lack of professional personnel have impacted patients’ follow-up rehabilitation.

(1) Service discontinuity

Patients require ongoing community and family support during their rehabilitation process, but they often do not receive the necessary services in a home environment. N4 stated, “Cognitive impairments post-stroke can pose significant challenges for patients living alone.” This indicates that patients may face considerable difficulties within the home rehabilitation setting.

N10 mentioned, “Stroke rehabilitation is lengthy and costly, but we don’t know which community professionals to contact or if they possess the necessary rehabilitation service capabilities.” This viewpoint reflects the current deficiencies in community services and their direct impact on patient recovery. N11 emphasized, “Rehabilitation is a continuous process, yet many communities only provide basic physiotherapy. Patients return home after discharge, and many do not experience the anticipated improvement or may develop complications that lead to readmission.” This highlights how inadequate community support severely affects patients’ long-term rehabilitation. N12 pointed out, “Many issues, such as medication management, diet, and home safety, are related to the patient’s cognitive abilities, and these cannot be adequately supported in a home environment.” This further emphasizes the vulnerabilities faced by patients in their domestic settings.

(2) Shortage of professional knowledge and equipment

Primary healthcare institutions struggle to maintain service capabilities comparable to those of higher-level hospitals due to limitations in environment, equipment, and personnel skills. N11 noted, “Many facilities are unwilling to accept high-risk stroke patients during referrals.” This reflects the barriers

encountered in the patient referral process and highlights the inability of primary healthcare institutions to manage complex cases effectively.

Respondents also called for the establishment of effective coordination mechanisms between hospitals and communities. N13 stated, “We lack effective guidance and can only rely on existing equipment and personnel.” This situation results in patients lacking the necessary support during their rehabilitation process. N14 pointed out, “The main barrier to effective community-based stroke rehabilitation is the lack of specialized knowledge and service personnel for stroke care. Professionals from different backgrounds often fail to collaborate effectively, leading to disconnection in the rehabilitation process.” This clearly underscores the importance and necessity of interdisciplinary collaboration.

4. Discussion

This study delved into the multifaceted factors surrounding cognitive impairments and their rehabilitation processes following a stroke. Through interviews with 15 rehabilitation professionals, major issues were identified in cognitive screening, individualized rehabilitation, lack of psychological support, and continuity of community rehabilitation services. These findings not only enhance our understanding of the current state of cognitive rehabilitation post-stroke but also contribute to advancing future clinical practices and policy-making.

4.1. Lack of standardization in cognitive screening

The results indicate that the lack of standardization in cognitive screening is a significant barrier faced by stroke patients during rehabilitation, directly impacting the identification and intervention effectiveness for cognitive impairments. Respondents frequently reported that existing screening tools lack uniformity and standardization, leading to noticeable heterogeneity in assessment results. This issue is particularly pronounced when dealing with patients who have communication barriers or lower educational levels; the limitations of current screening tools become even more evident. For instance, respondents noted that differences in language and comprehension often result in inaccurate screening outcomes during interactions with patients.

The applicability of standardized assessment tools across different cultural and linguistic backgrounds may lead to the oversight of potential cognitive impairments, subsequently affecting the timing and effectiveness of interventions for patients. This underscores the importance of cultural adaptability and comprehensibility of assessment tools for the effective identification of cognitive impairments, especially in multicultural clinical settings ^[12].

Early screening and intervention are widely recognized as key factors for improving long-term outcomes for patients ^[13]. Timely identification of cognitive impairments and appropriate interventions can significantly reduce patients’ long-term reliance on care and enhance their quality of life ^[14]. This finding highlights the critical role of effective screening tools and processes in clinical practice, particularly during the early stages of rehabilitation for stroke patients.

Importance of Individualized Rehabilitation

This study emphasizes the critical role of individualized rehabilitation plans in managing cognitive impairments. Respondents generally agreed that clinical practice should focus on the unique needs of patients. By developing personalized intervention strategies based on the severity of cognitive impairments, living environments, and personal goals, rehabilitation outcomes can be significantly improved. This approach not only better

accommodates patients' actual circumstances but also enhances their engagement, thereby improving the overall rehabilitation experience ^[15].

Specifically, individualized rehabilitation helps formulate corresponding intervention strategies for different types of cognitive impairments ^[16]. For instance, patients with executive function disorders may benefit from strategy training combined with behavioral heuristics to aid them in planning and executing tasks more effectively. Structured strategy training techniques, such as visual-spatial strategies and task breakdown, can effectively enhance executive capabilities. For patients with memory disorders, systematic training involving environmental cues and repeated practice is essential to strengthen their memory functions.

Feedback from respondents highlighted the practical need for individualized rehabilitation plans, especially in addressing specific challenges faced by patients. For example, consideration of the patients' living environments is crucial to ensure that the plans are feasible within the family and community contexts. Research shows that family involvement and environmental support are vital for enhancing rehabilitation outcomes. Incorporating family input into the design of rehabilitation plans can strengthen the support system for patients and facilitate the implementation of daily rehabilitation strategies ^[17].

Despite the multiple advantages of individualized rehabilitation, there are still many barriers to its practice. Therefore, it is particularly important to enhance rehabilitation professionals' awareness of the significance of individualized interventions. Studies indicate that many healthcare workers tend to rely on traditional, generic intervention methods in clinical settings, lacking sufficient knowledge and skills to adjust flexibly based on patients' conditions. Thus, improving healthcare workers' abilities, especially in personalized assessment and planning, is urgently needed.

4.2. The key role of psychological support in rehabilitation

The findings of this study demonstrate that psychological support plays an indispensable role in the cognitive rehabilitation of stroke patients. Respondents commonly reported that the lack of mental health professionals makes it challenging for patients to access comprehensive psychological support. Such interventions not only influence patients' adherence to and engagement with rehabilitation plans but are also directly related to their mental health and quality of life. Stroke patients often face multiple pressures—physical, emotional, and social—that can significantly impact their cognitive function and emotional state. For instance, psychological issues such as anxiety and depression have been shown to reduce attention, memory, and decision-making abilities, thereby hindering the rehabilitation process ^[18]. Therefore, providing systematic psychological support services is essential to facilitate holistic recovery.

In clinical practice, psychological support should be central to assessment and intervention efforts. The healthcare team needs to conduct psychological evaluations during patient admissions to identify mental distress promptly and to provide individualized psychological intervention plans, including group therapy, individual counseling, and family support. Through this multi-layered psychological intervention system, patients can more effectively master coping mechanisms, alleviate negative emotions, and enhance their self-efficacy and life satisfaction.

Moreover, regular training for clinical practitioners to enhance their knowledge and skills in psychological support is crucial for improving rehabilitation outcomes. Training content can include psychological intervention theories, mental health assessment methods, and emotional management strategies. Strengthening healthcare professionals' capabilities in psychological support can not only improve the implementation of rehabilitation

plans but also help patients better navigate the emotional challenges of the rehabilitation process.

Family involvement also plays a vital role; support should not come solely from professionals. The care and support from family members can effectively promote patients' psychological recovery^[19]. Therefore, when developing rehabilitation plans, it is important to encourage family participation, enabling them to provide emotional support in daily life and enhancing patients' sense of social involvement and belonging.

4.3. Insufficiency of community continuity rehabilitation services

This study highlights the rehabilitation challenges faced by stroke patients after transitioning to community care. Many respondents pointed out that community healthcare institutions generally grapple with insufficient resources and a lack of expertise, which often results in service interruptions for patients post-discharge. Many community healthcare facilities lack specialized training and equipment for addressing cognitive impairments, leaving patients without necessary rehabilitation support after leaving the hospital.

To address these issues, establishing a continuity rehabilitation service system from hospitals to communities becomes particularly crucial^[20]. First, strengthening communication and cooperation between hospitals and community healthcare institutions is essential to clarify referral procedures. When patients are discharged, hospitals should systematically convey patients' rehabilitation needs and treatment plans to community physicians, ensuring that patients receive continuous, individualized rehabilitation services after transitioning to community care. This collaboration can help alleviate patients' anxiety caused by service interruptions and improve rehabilitation outcomes.

Second, it is advisable to form multidisciplinary community rehabilitation teams consisting of physicians, nurses, physical therapists, occupational therapists, and psychological counselors, among others, to provide comprehensive rehabilitation services^[21]. This team can hold regular meetings to discuss patients' rehabilitation progress, develop specific rehabilitation plans, and adjust them based on patient feedback. This integrated service model can more effectively meet patients' individual needs and facilitate their functional recovery.

Enhancing the professional qualifications of primary healthcare personnel is also vital. Hospitals and relevant institutions should provide targeted training to improve community healthcare workers' capabilities in assessing cognitive impairments, developing individualized rehabilitation plans, and implementing intervention strategies. Additionally, community healthcare personnel should be encouraged to participate in the actual rehabilitation process, learning to adjust treatment plans in response to the various changes that may arise during the rehabilitation journey through observation and practical experience.

Finally, leveraging modern technological methods, such as telemedicine and digital health applications, can further enhance the quality and efficiency of community rehabilitation services^[22]. By utilizing remote monitoring technologies, healthcare teams can better track patients' rehabilitation progress, provide timely recommendations, adjust treatment plans, and offer psychological support, which is particularly important for promoting patients' cognitive recovery and mental health.

5. Conclusion

In summary, this study provides a new perspective for understanding the current state of cognitive rehabilitation following a stroke, highlighting the inadequacies in standardized cognitive screening, individualized rehabilitation, psychological support, and the importance of community continuity in rehabilitation. By deeply analyzing the

viewpoints of the respondents, this research fills some gaps in the existing literature and offers an empirical foundation for future interventions and policy development. The significant clinical implications of this study call for the establishment of clearer rehabilitation policies and standards, the strengthening of interdisciplinary collaboration, and the enhancement of training and education for professionals. Additionally, incorporating mental health interventions into the rehabilitation framework is recommended, creating a multidimensional support system to better meet the complex needs of stroke patients during their recovery process. This comprehensive support not only enhances patients' quality of life but also improves their adherence to rehabilitation. Furthermore, the findings provide a theoretical basis for improving community rehabilitation services, emphasizing the critical importance of collaboration between hospitals and communities in ensuring continuity of care. By promoting this holistic transformation, the rehabilitation industry can gain new momentum and direction, thereby achieving more efficient patient recovery.

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