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Community Rehabilitation Network (CRN) 30th Anniversary cum The Hong Kong Society for Rehabilitation (HKSR) 65th Anniversary Conference

Lee Shau Kee Lecture Centre, Centennial Campus, The University of Hong Kong

CONTENTS **PAGE**

Introduction

Keynote Presentations

Outstanding Oral Presentations

CONTENTS PAGE

Outstanding Poster Presentations (Professionals)

CONTENTS	PAGE

Outstanding Poster Presentations (Students)

Introduction

Held on 17-18 January 2025, at the Lee Shau Kee Lecture Centre, Centennial Campus, The University of Hong Kong, the Community Rehabilitation Network (CRN) 30th Anniversary cum The Hong Kong Society for Rehabilitation (HKSR) 65th Anniversary Conference was co-organised by HKSR, the Faculty of Social Sciences at The University of Hong Kong, and the School of Nursing at The Hong Kong Polytechnic University.

The conference theme, 'Synergising Rehabilitation with Primary Healthcare for Quality Community Living and Sustainable Development,' aimed to provide an interactive platform for exchanging both international and local experiences and insights. The goal was to foster synergy and collaboration in building a sustainable health ecosystem that enhances quality of life and wellbeing, reduces health inequalities, and promotes inclusive, safe, and resilient communities, ultimately advocating for a more inclusive society. For more details, please visit: https://www.rehabsociety.org.hk/hksr-crn-30th-anniversary-cum-hksr-65th-anniversary-conference-home/.

The conference featured over 80 oral presentations and nearly 40 poster presentations delivered by practitioners, researchers, policymakers, and service users/caregivers. This Supplement includes articles contributed by three keynote speakers: Prof Michael Kidd from Australia, Ms Cai Cai from Thailand, and Dr Kaori Yamaguchi from Japan. They discussed the increasing need to integrate rehabilitation into primary care as a key trend in future healthcare systems, and explored various national-level strategies for promoting effective and inclusive community-based rehabilitation. Additionally, this Supplement presents abstracts of 14 outstanding oral presentations, 6 exceptional poster presentations for professionals, and 3 for students.

Keynote Presentations

Integration of rehabilitation and primary healthcare: global perspectives

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Why we need better integration of rehabilitation and primary healthcare

Rehabilitation is an essential health service, along with prevention, promotion, treatment, and palliation. However, in many countries, individuals do not have access to the rehabilitation services they need. The best way to ensure rehabilitation services reaching all those in need is by integrating them across all levels of the health system, as part of universal health coverage.[1] The Global Burden of Disease Study in 2019 identified 2.41 billion individuals with conditions that would benefit from rehabilitation, contributing to 310 million years lived with disability (YLDs)—an increase of 63% since 1990.[2] The Western Pacific Region had the highest need for rehabilitation services (610 million people and 83 million YLDs).[2] Rehabilitation should no longer be regarded as a service required by only a few people; it needs to be brought closer to communities as an integral part of primary healthcare (PHC) to reach more people in need.

In a typical primary care practice of 2000 adults, up to 100 will have a history of stroke, and 5 to 10 will experience a new stroke each year. Approximately 50% to 80% will have hypertension, 20% to 30% will have diabetes, and 10% to 30% will have comorbid heart disease or atrial fibrillation.[3,4] The needs of these patients can be complex, depending on the cause and severity of their stroke and other factors, including the presence of other chronic health conditions. PHC can play a crucial role in disease prevention, the management of acute symptoms, and the management of chronic disease because it provides easy access and care that is continuous, comprehensive, and coordinated.[5]

Megatrends in health driving the need for integration of rehabilitation and primary healthcare

An ageing population, climate change, digitalisation, the shifting of energy markets and global economic power, and rising consumerism are affecting many countries and driving global megatrends in health, changing how people live and work. The ageing population brings a significant focus on prevention, which is becoming increasingly important for detecting early signs of illness and enabling effective health promotion and protection. This approach can help to prevent further deterioration and complications of existing conditions, thereby reducing potentially avoidable demand on healthcare services—particularly at the secondary and tertiary levels. Scientific advances in precision medicine are expanding opportunities for personalised prediction, diagnosis, and treatment of illness. Precision medicine can be incorporated into routine practice in PHC to individualise preventive health efforts.

The healthcare workforce should be leveraged to improve health literacy, foster cultural safety, and encourage community engagement, all of which contribute to advancing health equity. The rise of consumerism in health provides the opportunities to understand the preferences, expectations, and behaviours of health consumers and their carers, and to co-create and co-design health systems that meet their needs. PHC providers are in a strong position to support the empowerment and engagement of community members in managing their own health, as well as that of their families—an approach aligned with community-based rehabilitation.[6]

The traditional boundaries of the health system have expanded, changing how, where, and by whom healthcare services are delivered. The digitalisation of the healthcare system can improve the efficiency, accessibility, and availability of care, enabling PHC to become the hub of 'limitless care' and opening new ways of working and workplace models. Artificial intelligence and other digital solutions offer opportunities to meet rising healthcare demand while freeing up manpower to focus on more complex tasks. These solutions would allow PHC teams to expand their scope within the community, for example, in the delivery of rehabilitation services. The impact of external factors such as climate change must not be underestimated. Climate change can lead to infectious disease outbreaks due to global warming, as well as broader global disruptions caused by imbalances in economic power, creating an increasingly uncertain and volatile operating environment for health systems. There is an urgent need for health systems and workforces to build resilience in the face of these external threats. The 2018 Declaration of Astana outlines the critical role of PHC and emphasises that PHC is an essential foundation for health emergency and risk management, and for building community and national resilience within health systems.[7] Australia is one of the countries with greater integration of general practitioners in Disaster Health Management.[8]

Primary healthcare after stroke

Most readmissions within 30 days of discharge after a stroke are related to general medical conditions rather than neurological conditions and can be reduced by early interventions in PHC.[9] Some stroke complications can be prevented by managing vascular risk factors, preventing further thrombotic events, and addressing the social determinants of health (Table).[3] Identifying and addressing unmet needs is also an important approach to prevent stroke complications (Table).[10] If the question, "Would this stroke patient benefit from referral to any other services to improve their functional impairments and promote their health and well-being?" is asked in PHC, this would improve the recovery phase. The prevalence of unmet needs after discharge ranges from 20% to 75%.[10] Stroke care provides a compelling example of the importance of integrating rehabilitation and PHC. PHC providers can advocate for patients when specialist care is needed and can help ensure effective coordination among specialists and subspecialists.

The way forward

If rehabilitation is integrated at the PHC level, it can bring services closer to the community, thus reducing costs and improving the equity and timeliness of service delivery. Rehabilitation cannot be scaled up in isolation; rather, the health system as a whole must be strengthened to support better integration. This integration requires interdisciplinary protocols that support integrated rehabilitation service models, responsive multidisciplinary care plans, and interprofessional education.[11]

TABLE. Preventing complications during the post-stroke period[3,10]

Managing vascular risk factors
• Maintain blood pressure below 130/80 mmHg for most patients
• Prescribe lipid-lowering therapy to achieve preferable LDL levels (<2.6 mmol/L, or ideally <1.8 mmol/L)
• Target HbA1c <7% for patients with diabetes (preferably <6.5%)
• Select glucose-lowering medications with proven cardiovascular benefit (in addition to metformin) for patients with diabetes
• Offer multidimensional care such as lifestyle management, nutritional counselling, self-management support, and promotion of medication adherence
• Implement weight management strategies for overweight and obese patients
Prevention of cardio-embolism
• Initiate antiplatelet therapy where appropriate
• Prescribe oral anticoagulation for patients with atrial flutter/fibrillation, if not contraindicated
Address social determinants of health
• Assess literacy level, language proficiency, medication affordability, food insecurity, housing, and transportation when managing stroke risk factors
• Monitor healthcare performance measures at population level to identify and reduce disparities
• Ensure oral instructions are understandable and sensitive to patients' health literacy
Screening and managing unmet needs
• Depression screening and management
• Cognitive impairment screening
• Communication assistance
• Mobility impairment and fall prevention
• Pain and spasticity management
• Support for independence in activities of daily living
• Management of urinary or bowel incontinence
• Address sexual disability
• Support for return to work
• Coordination of physical rehabilitation services

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Multilayered service delivery systems for the provision of rehabilitation in community settings for people at all life stages in Japan

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Introduction

In Japan, the establishment of a system for providing rehabilitation began in the 1960s.[1] Along with the training of physical and occupational therapists, rehabilitation was integrated into related policies and systems, and the provision of services expanded. This article introduces Japan's current system for rehabilitation service delivery.

An ageing society has considerably influenced the expansion of rehabilitation services and the associated workforce. In 2000, a recovery (ie, convalescent) rehabilitation ward was introduced to provide specialised and intensive rehabilitation, particularly for older patients with non-communicable diseases such as stroke, which cause disabilities. The aim is to improve functional abilities for daily living and to enable patients to return home as much as possible. The number of patients receiving recovery rehabilitation has been increasing since its inception.[1,2] Whereas acute and recovery rehabilitation are provided in hospitals, long-term rehabilitation for children and adults with disabilities (CWDs and PWDs), as well as older people in the chronic phase, is provided in the community.

Systems for rehabilitation in Japan

There are three major frameworks for providing rehabilitation: national medical (ie, health) insurance, national long-term care insurance for older people, and public welfare services. Medical insurance covers acute and recovery rehabilitation; long-term care insurance covers rehabilitation for older people in the chronic phase in the community; and the welfare service scheme covers rehabilitation for CWDs and PWDs in the community.[3]

Governance of healthcare is the responsibility of both central and local governments (ie, prefectures and municipalities of cities, towns, and villages). Prefectures and municipalities correspond to the tertiary and primary care levels, respectively. Healthcare plans for secondary care are formulated in prefectures by each secondary healthcare region, which consists of multiple neighbouring municipalities. These regions ensure the provision of acute and recovery rehabilitation for people in hospitals located within their own or nearby areas. Rehabilitation under the long-term care insurance and welfare service schemes is provided at the primary care level, administered by municipalities. However, regional disparities have been reported in the provision of rehabilitation, and there might be unmet needs in specific areas.

Rehabilitation in community for older people

The proportion of older people over the age of 65 years in Japan has reached 29.1% in 2024.[4] One of the key policies for older care is the establishment of a community-based integrated care system. This system aims to comprehensively ensure the provision of healthcare, nursing care, livelihood support, and rehabilitation, enabling older people to continue living in familiar surroundings as much as possible, even if they become dependent on care. Older adults with disabilities (certified as needing care) can receive one-on-one rehabilitation by professionals under the long-term care insurance system, delivered in three forms: day care, home-visit, and in-facility services. On the other hand, healthy older adults are encouraged to participate in community gathering places called '*kayoi-no-ba*' to maintain their health and prevent functional decline. The Japanese government has promoted the involvement of rehabilitation professionals in these settings to further strengthen preventive care.

Rehabilitation in the community for children and adults with disabilities

Rehabilitation for CWDs and PWDs in the community is multi-layered. In addition to hospital-based rehabilitation as needed, individuals receive necessary welfare services according to their life stage.[3] The welfare service system provides developmental support for preschool-aged CWDs and offers vocational rehabilitation and training for independent living for PWDs. For school-aged children, the educational system provides various forms of support, such as advisory groups that visit schools, which include rehabilitation professionals. Day-care developmental support (habilitation) is provided for children with all types of disabilities, including motor disabilities such as cerebral palsy, neurodevelopmental disabilities such as autism spectrum disorders, and intellectual disabilities such as Down syndrome. An increasing number of rehabilitation professionals are working in these services.

Patient journey and service coordination

The following examples illustrate service coordination for individuals with acquired and congenital disabilities.

In the case of an older stroke patient with an acquired disability, the individual may have attended community gathering places prior to onset of the condition. After onset, they receive hospital-based rehabilitation immediately and throughout the recovery period (daily for up to 6 months). Following discharge, they return to the community and may receive rehabilitation services under the long-term care insurance system, if necessary. Although the process from disease onset to receiving rehabilitation during the recovery period is mostly automatic, coordination at the time of discharge (eg, referrals and the sharing of patient information between hospitals and care providers) is necessary.

In the case of children with autism as a congenital disability, developmental (ie, health) check-ups required by national law often detect their developmental delays and lead them to appropriate services. These check-ups are conducted by municipalities, generally involving public health nurses; however, in certain municipalities, rehabilitation professionals also participate. A key issue is that welfare services are often interrupted due to the many transitions that occur across life stages. It is therefore particularly important to ensure that necessary support is provided seamlessly and at appropriate times throughout an individual's life.

Conclusion

Over the past few decades, rehabilitation services have expanded, enabling access for CWDs, PWDs, and older adults who need them. To further develop the system, it may be important to: (1) improve coordination between different types of services and create a system for providing seamless support across life stages; (2) allocate rehabilitation professionals appropriately in both quantity and quality; and (3) formulate data-informed policies based on factors such as the level of rehabilitation need, actual service provision, and regional disparities.

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A multi-stakeholder partnership and whole-of-society approach to advancing community-based rehabilitation

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In recent decades, the global community has witnessed a paradigm shift in the perception of disability—from a charity- and medical-based model to a social and human rights model. Under the social model, disability is no longer viewed solely as the result of an impairment but rather as the interaction between environmental barriers and impairment. With this shift, rehabilitation is recognised as a collaborative process in which individuals with disabilities actively participate in determining their own service needs, rather than having needs imposed upon them. The human rights model is enshrined in the Convention on the Rights of Persons with Disabilities. It promotes inclusive community-based rehabilitation (CBR) to empower persons with disabilities to fully participate as equal members of society, enjoying health, well-being, and access to education, as well as social, cultural, religious, economic, and political activities.

CBR is defined as "a strategy within general community development for the rehabilitation, equalisation of opportunities, poverty reduction and social inclusion of all people with disabilities".[1] CBR must be implemented through collaboration among persons with disabilities themselves, their families, communities, relevant governmental and non-governmental organisations, and service providers. This collaboration is underpinned by a whole-of-society approach and multi-stakeholder collaboration.

The Jakarta Declaration on the Asian and Pacific Decade of Persons with Disabilities ushered in a new decade (2023-2032) centred on this approach.[2] It called for meaningful participation by women and men with disabilities in all their diversity, in planning, implementing, and making decisions regarding disability-related policy and programmes, including CBR. The Incheon Strategy to "Make the Right Real" in Asia and the Pacific was the first regionally agreed disability-specific development goal framework in the world.[3] Adopted by Asia-Pacific countries in 2013, it continues to guide disability-inclusive development in the region. Goal 4 of the Incheon Strategy[3] focuses on enhancing social protection and access to health and rehabilitation services for persons with disabilities.

Challenges persist

Despite efforts made by the international community and governments to promote CBR, significant barriers persist in the design, delivery, and monitoring of disability-inclusive CBR. In reviewing the progress and challenges of implementing the Incheon Strategy,[3] 21% of the 28 Asia-Pacific countries and territories that responded to the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) survey identified limited access to health and rehabilitation services as a key challenge for persons with disabilities.[4] This indicates that one in five countries within the region faces substantial hurdles in ensuring equitable access to healthcare and rehabilitation services for persons with disabilities.

This gap is associated with several factors that prevent CBR from becoming more inclusive and effective. First, attracting and retaining qualified personnel—particularly in remote areas—is crucial but often difficult due to limited resources and challenging working conditions. Integrating CBR programmes with existing health, education, and social welfare systems is imperative for comprehensive support, but coordination remains inadequate. Striking a balance between providing assistance and empowering people with disabilities to advocate for their own needs is an ongoing challenge.

Key elements for a holistic approach to community-based rehabilitation

Addressing these multifaceted challenges requires a whole-of-society effort to advance CBR. This entails close collaboration and active participation of all stakeholders, including governments, civil society organisations, private sector entities, as well as organisations of and for persons with disabilities. Based on an analysis of successful CBR practices in the region, the following elements are key to developing a holistic CBR strategy or programme:

1. **Capacity Building** is essential for empowering CBR personnel and stakeholders, including families and communities. To ensure the delivery of inclusive and quality services that meet the diverse needs of persons with disabilities, capacity building must be included as a core element of CBR programmes, thereby strengthening the skills and knowledge of CBR workers and families.

Disclaimer: The views expressed herein are those of the author and do not necessarily reflect the views of the United Nations.

2. **Community Engagement** fosters partnerships between persons with disabilities, their families, and communities to promote inclusion and empowerment, ensuring that the voices of persons with disabilities are heard and respected. Engaging the community helps break down barriers and build a supportive environment where everyone can thrive.
3. **Accessible Services** ensure that rehabilitation and other services are accessible to all persons with disabilities, regardless of their location or socioeconomic status. This means making services available in underserved areas and ensuring they are affordable and user-friendly. Accessibility encompasses not only physical access, but also the provision of information and communication in formats that are understandable and usable by all.
4. **Innovation** is key to enhancing the quality and accessibility of services. This includes leveraging digital tools, developing new therapeutic techniques, and fostering a multi-stakeholder approach that brings together various sectors and areas of expertise. Innovation ensures that CBR programmes remain effective and relevant in a rapidly changing world.

By encompassing these four components, a whole-of-society approach to advancing CBR can be achieved. Below are two examples from UNESCAP's experience in working with governments and non-governmental organisations to adopt a holistic approach to CBR, engaging a variety of stakeholders from the community to the national level.

In the Maldives, the government has developed a multisectoral mechanism at the community level on all inhabited islands to support persons with disabilities and other vulnerable populations. UNESCAP collaborated with the Ministry of Social and Family Development to build the capacities of community workers, who played a critical role in coordinating support for individuals with disabilities across various government agencies and service providers. The project strengthened the skills of social workers and family members by equipping them with CBR-related knowledge and practices, and it fostered partnerships among all stakeholders, including the private sector. The project also embraced technology, reviewed assistive devices and the CBR management structure, offering an innovative and scalable solution to enhance the delivery and accessibility of rehabilitation services.

In Bangladesh, UNESCAP collaborated with the Centre for Disability in Development to promote inclusive community-based mental health services. By working closely with local organisations, the initiative created a support network to encourage open conversations about mental health, and trained persons with disabilities as peer facilitators to strengthen mental health services in their communities. By engaging communities, the project enhanced understanding and awareness of mental health and helped to reduce stigma. It also advocated for the integration of community-based mental health services into public policy, ensuring long-term sustainability and national-level impact.

A forward-looking strategy to advance community-based rehabilitation

Drawing on lessons learned from diverse CBR programmes, the following recommendations are put forth for consideration by governments and stakeholders to improve CBR strategies in the new decade.

1. **Develop a holistic and concrete strategy for CBR**. Community-based rehabilitation programmes must be integrated into national development plans and sectoral policies—including those related to health, education, and labour—to foster a whole-of-government and whole-of-society commitment.
2. **Enhance capacity building initiatives** by providing targeted and specific training programmes, along with ongoing technical support, for CBR personnel, organisations of persons with disabilities, and community leaders. This training and support ensures that they are well-equipped to address the diverse needs of persons with disabilities.
3. **Leverage innovative solutions** to improve existing rehabilitation programmes and services, including the use of digital tools and artificial intelligence–based solutions. Embracing technology to enhance service delivery—such as through tele-rehabilitation and digital platforms—brings robust opportunities but also requires addressing the digital divide and ensuring accessibility for all.
4. **Institutionalise multi-stakeholder collaboration** by developing partnership mechanisms that systematically engage local governments, service providers, and civil society organisations in the CBR process. The inclusion of persons with disabilities in planning and decision-making amplifies their voices and ensures that solutions are both tailored and practical.
5. **Establish monitoring and evaluation mechanisms** to track progress, identify gaps, and measure impact. Monitoring enhances accountability and fosters continuous improvement.

In conclusion, CBR represents a powerful opportunity to transform communities by emphasising inclusion and empowerment. By strengthening community engagement, enhancing capacity, leveraging innovation, fostering collaboration, and monitoring progress, we can work together to ensure that no one is left behind.

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MOVIN' CARE for PD: a project on community awareness, rehabilitation and empowerment for Parkinson's disease

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Background: Parkinson's disease (PD) is the second most common neurodegenerative disorder, significantly impacting patients and caregivers. Although an integrated service model can greatly benefit the PD population and individuals with early symptoms, there is currently a lack of comprehensive care management strategies for these groups.

Objectives: This project aims to develop a holistic, patient-centred approach for managing PD, with four primary objectives: (1) raising public awareness and promoting PD prevention, (2) leveraging resources for disease adjustment and management at both individual and community levels, (3) providing multi-level support services to slow disease progression and enhance quality of life, and (4) building community networks to support those affected by PD.

Practices: To achieve these objectives, the project implements a range of evidence-based practices, including comprehensive screening and assessments, integrative healthcare interventions, capacity-building programmes for healthcare professionals and primary caregivers, and active community engagement. The project advances an evidence-based, integrative healthcare service delivery model that provides biopsychosocial-spiritual care to individuals with PD and those actively seeking to prevent it. For individuals with PD, interventions include mindful yoga and art therapy. For those concerned about developing PD, mindful yoga, somatic interventions, and physical exercise are offered. The project also includes peer support and caregiver training, as well as volunteer and professional training programmes aimed at building community capacity. Programme evaluation with scientific rigor and social impact assessment, including randomised controlled trials, is embedded in this multi-component project to generate empirical evidence.

Implications: The proposed integrative healthcare model has the potential to transform PD management in Hong Kong by promoting a PD-friendly society and reducing the stigma associated with the disease. The model's scalable and adaptable nature offers promising implications for broader applications in managing other chronic diseases, contributing to the advancement of holistic healthcare practices.

Nurturing physiotherapy students as frontline advocates for primary healthcare

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Background: Primary healthcare is the cornerstone of an effective healthcare system, emphasising accessibility, prevention, and community-based services. Physiotherapy students, as emerging healthcare professionals, play a crucial rule in promoting health and wellbeing at the primary care level. Preparing them as frontline advocates is essential for enhancing community health outcomes.
Objectives: The programme aims to equip physiotherapy students with the competencies required to deliver impactful primary healthcare services. By fostering an understanding of diverse physiotherapy practices and health promotion activities, students are prepared to address community health needs effectively.
Practices: The Clinical Education II in the Hong Kong Polytechnic University BSc (Hons) in Physiotherapy programme provides a comprehensive framework for developing these skills through a variety of activities. Students are mandated to complete 80 hours of participation, with the autonomy to select activities that align with their interests and schedules. This flexibility ensures a tailored educational experience. Examples include fall prevention programmes, health screenings for the older adults, and conducting exercise classes in patient self-help groups. Students can initiate activities or collaborate with non-governmental organisations, enhancing community health initiatives through partnerships.
Implications: With an average cohort size of 150 students, this programme mobilises a substantial workforce dedicated to community health enhancement. Through direct patient interaction and community engagement, students gain invaluable insights into primary healthcare dynamics. This experiential learning cultivates proactive, empathetic, and effective healthcare providers. The programme not only advances students' professional development but also aligns with broader objectives of strengthening primary healthcare systems. By integrating rehabilitation with primary healthcare, physiotherapy students emerge as key players in advancing quality community living. This initiative exemplifies the conference's theme, highlighting the critical role of education in fostering a resilient and responsive healthcare workforce. Through these efforts, physiotherapy students are poised to make significant contributions to community health and wellbeing, ensuring a sustainable future for primary healthcare.

The encounter of two worlds: divided narratives of decision-making on cancer treatment between physicians and patients

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Background: Divided narratives pose long-standing difficulties in physician-patient communication. In cancer treatment decision-making, these divided narratives hinder mutual understanding and agreement regarding the illness and its treatment.
Objectives: For effective treatment decision-making, it is necessary to investigate the similarities and differences in these divided narratives.
Methods: This study adopted a qualitative narrative inquiry approach to examine the data, which includes interviews with 32 cancer patients and 16 paired physicians in two hospitals in China. Data analysis was conducted using grounded theory to generate findings.
Results: Both physicians and patients were concerned about the goals and obstacles to their decision-making on cancer treatment. Four common aspects of goal setting were identified from the divided narratives: decision pools, treatment goals, identity practice, and preferred identity. Four common obstacles were identified: pain and trust, communication gap, financial issues, and complex family dynamics. However, the meanings attached to these eight aspects differed between physicians and patients.
Implications and Conclusions: Cancer treatment decision-making is an encounter of the scientific world and lifeworld. A divided narrative approach can identify the similarities and differences in the decision-making on cancer treatment between physicians and patients. Physicians generally adopt a rational decision-making approach, while patients generally adopt a relational decision-making approach. Despite common concerns regarding their goals and obstacles, their contextualised interpretations differ, which demonstrate the physician's and the patient's pursuit of preferred identities in decision-making. The results of this study provide a new perspective to treatment decision-making, emphasising the importance of narrative integration in reaching mutual agreement.

Holistic community care of people with spinal cord injury: a mindfulness and motivational interviewing oriented physical-psychological integrative intervention for community-dwelling spinal cord injury survivors: a mixed-methods randomised controlled trial

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Objective: To evaluate the feasibility, acceptability, and efficacy of a mindfulness- and motivational interviewing-oriented physical-psychological integrated intervention in community-dwelling spinal cord injury (SCI) survivors.

Design: A mixed-methods randomised controlled trial.

Setting: Local organisations for the handicapped in Hong Kong.

Participants: Community-dwelling adults with SCI (n=72).

Interventions: Participants in the intervention group (n=36) received video-guided exercise for daily practice and weekly online group psychological session (mindfulness and motivational interviewing-oriented) for 8 weeks. Participants in the control group (n=36) received an 8-week online group didactic education on lifestyle discussions and general health suggestions.

Main outcome measures: Primary outcomes included quality of life, physical activity, depression, and chronic pain. Secondary outcomes included exercise self-efficacy and mindfulness. Outcomes were measured at baseline, post-intervention, and 3-month follow-up. Focus group interviews were conducted post-intervention.

Results: The recruitment, retention, and adherence rates were 84.7%, 100%, and 98.6%, respectively. The intervention showed significant positive effects on preventing declines in quality of life at 3-month follow-up (Cohen's d=0.70, 95% CI=0.22-1.18). Positive trends manifested in physical activity, depression, chronic pain, and exercise self-efficacy. Three qualitative categories were identified: subjective improvements in exercise, physical, and social wellbeing; perceived changes in mindfulness and mental wellbeing; and intervention facilitators and barriers.

Conclusions: The mindfulness- and motivational interviewing-oriented physical-psychological integrated intervention is feasible and acceptable. The significant prolonged effect in maintaining quality of life and positive impact on physical and psychosocial wellbeing indicate its value to address major health challenges of community-dwelling SCI survivors.

Feasibility, acceptability and preliminary effectiveness of the "Outdoor Rehab-Fit" integrative mHealth intervention among inactive frail older adults in Hong Kong

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Background: An integrative mobile health (mHealth) intervention combining outdoor exercise facilities, a mobile application (Outdoor Rehab-Fit), and workshop components was developed.
Objectives: This study evaluated the acceptability, feasibility, and immediate post-intervention effects of the integrative mHealth intervention.
Methods: This feasibility pilot randomised controlled trial was conducted in Hong Kong. The intervention combined group sessions, outdoor self-practice, and a mobile app to promote engagement with outdoor exercise facilities, while the control group received health education with an experiential exercise component. Assessments were conducted at baseline and post-intervention to evaluate the acceptability, feasibility, and preliminary effects (physical activity level, exercise self-efficacy, mental health, and outdoor exercise facility utilisation) of the intervention.
Results: Thirty-six participants were recruited. The integrative mHealth intervention demonstrated potential feasibility, with a 50.7% recruitment rate, 78.8% completion rate, high adherence to workshops (93%), and reasonable participation in outdoor practice (71%) and mobile app engagement (69%). The integrative intervention was well-received by participants, who appreciated its integrative structure, content and delivery mode. They suggested improvements, including adding a feature to locate a specific equipment via the mobile app, and incorporating additional supervised demonstration sessions in a park to enhance user experience. Additionally, the intervention group exhibited significantly better mental wellbeing (F=9.76, p=0.04, effect size [ES]=0.23) and increased utilisation of outdoor exercise facilities (frequency: Z=3.33, p=0.001, ES=0.83; duration: Z=3.12, p=0.002, ES=0.78) compared to the control group, while no between-group differences in physical activity levels (F=1.47, p=0.23, ES=0.05) and exercise self-efficacy (F=0.41, p=0.52, ES=0.01) were noted.
Implications and Conclusions: This study provides evidence to support the feasibility and acceptability of the integrative mHealth intervention among inactive frail older adults in the community. The app and integrative intervention have a large potential to be used in primary care settings.

The impact of a 4-weekend forest bathing programme on hypertensive middle-aged adults

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Background: Persistent stress is associated with higher blood pressure in urban populations. Recent studies suggest that forest bathing (FB) can decrease sympathetic nervous system activity and cortisol levels, leading to relaxation and reduced blood pressure.
Objective: This study evaluated the effectiveness of a 4-consecutive-weekend urban FB programme in lowering blood pressure among middle-aged Chinese adults with hypertension in Hong Kong.
Methods: This 3-armed randomised controlled trial lasted 12 weeks and recruited participants aged 45-64 with stage 1 or 2 hypertension from the community. Participants were randomly assigned to the FB group (n=106), the diaphragmatic deep breathing exercise (DDBE) group (n=109), or the usual care-control (UC) group (n=108) at a 1:1:1 ratio. Systolic blood pressure (SBP) (primary outcome), heart rate variability (HRV), anxiety levels, and mood states were measured at baseline, pre- and post-intervention over 4-consecutive weekends and 8 weeks post-intervention. Statistical analyses included intent-to-treat, Chi-squared test, and analysis of variance.
Results: SBP showed a significant decrease among the intervention groups after 4 weeks (-7.9 mmHg, $p<0.001$), with a mean (standard deviation) change of -9.5 (14) mmHg in the FB group, compared to -7.8 (13) mmHg in the DDBE group and -3.8 (10) mmHg in the UC group. The analysis of SBP at 8 weeks post-intervention revealed a similar result (-7.3 mmHg, $p<0.001$).
Implications and Conclusions: The 4-consecutive-weekend FB programme benefits relaxation and blood pressure control in hypertensive middle-aged adults in urban settings like Hong Kong. These results encourage healthcare providers to incorporate nature-based interventions into non-pharmacological approaches for preventing hypertension and improving mental health in the Chinese population. This programme can be promoted to at-risk populations in community centres as a preventive measure.

Introducing loving-kindness meditation to patients with chronic musculoskeletal pain

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Background: Mindfulness meditation is an essential component in mind-body exercises such as Tai Chi and Qi Gong. Loving-kindness meditation (LKM) has been shown to reduce clinical pain intensity and disability while increasing trait self-compassion and interoceptive awareness. Patients with chronic pain are often presented with disconnection, negativity and distress. Therefore, introducing LKM to people with chronic musculoskeletal pain is crucial and has been proven effective for relieving pain.
Purpose: These two-workshop series aimed at updating chronic pain sufferers with new pain insights by comparing the two-arrow metaphor with pain neuroscience and creating awareness of the need for LKM for curing pain beyond medication or physical massage, and joint mobilisation.
Methods: 20 participants attended two 1-hour sessions, conducted over 2 weeks. Questionnaires on pain intensity and psychological distress were distributed before the first session and 2 weeks later. A guided meditation of Loving-kindness Meditation was conducted for 15 minutes. Participants were asked to perform the meditation daily for 2 weeks. Training log was given to monitor the compliance.
Results: 70% (14 out of 20) of participants reported a drop in pain score. The median pain score reduction was -3.5 (n=20, p=0.0023), indicating a significant reduction in pain after 2 weeks of practice. 2 participants reported no change and 4 reported an increase in pain score (+1 to +4). 5% reported a reduction of more than 12 points. One participant's pain score dropped from 17 to 5 (while the median drop was 2.5). 11 participants experienced a greater-than-median reduction in pain score.
Conclusion: LKM is effective in lessening pain in as brief as 2 weeks.

The use of screening tool to provide stratified care to patients with low back pain in primary care effective in improving pain-related outcome

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Background: 8 in 10 people experience low back pain (LBP) in their lifetime. LBP patients with high psychosocial risk are more likely to develop chronic pain. Providing treatments regardless of risk can result in a high level of disability and ongoing care seeking.
Objective: We aimed to investigate the effectiveness of the use of a screening tool to provide stratified care to LBP patients at the Eastern District–District Health Centre Express (ED-DHCE).
Practice: STarT Back Questionnaire (STBQ) is a valid and reliable tool in screening psychosocial risk in LBP patients. Clients reported of LBP (n=582) in ED-DHCE were asked to complete the STBQ from October 2022 to August 2024 and triaged into low, moderate and high-risk groups. The low-risk group joined the short pain programme consisting of exercise, pain education and pharmaceutical management, followed by a post-test on perceived symptom improvement. The moderate and high-risk groups joined the patient empowerment programme (PEP) conducted by physiotherapists, consisting of exercise, pain education and flare-up management. The high-risk group also received psychological intervention conducted by a social worker, the Acceptance and Commitment Therapy, aimed at enhancing mindfulness and cognitive reframing for better pain acceptance and psychological flexibility. In addition to perceived symptom improvement, the moderate and high-risk groups completed the STBQ, Pain Self-Efficacy Questionnaire (PSEQ), and Roland-Morris Disability Questionnaire (RMDQ) before and after the intervention. The low-risk group reported a 48% improvement in symptoms. The moderate and high-risk groups showed significant improvements in RMDQ score and PSEQ score, along with a significant reduction in psychosocial risk among those classified as high risk as measured by the STBQ. They also reported a 60% improvement in symptoms.
Implication: The use of STBQ to provide stratified care to LBP patients combined with physical and psychosocial intervention is effective in improving pain-related outcomes. This model can be implemented in other primary care settings.

The new era in physiotherapy management for oxygen therapy users: tele-monitoring for community care

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Background: The growth of telehealth has accelerated rapidly since the onset of COVID-19 pandemic, transforming various healthcare services including physiotherapy. The outreach physiotherapy team (the Team) at North District Hospital has leveraged technology to support oxygen therapy users, with the aim of facilitating safe use of oxygen therapy. With continuous pulse oximetry tele-monitoring, physiotherapists (PT) and respiratory team can closely monitor oxygen users and hence provide suitable interventions to meet clients' needs.
Objective: To describe a tele-monitoring service provided by outreach physiotherapists in a public hospital in facilitating community care.
Practice: In late 2022, the Team introduced a new wearable sensor model that allows near-real-time data retrieval. Hospital-owned assets and easy setup saved the time spent in logistics. PT can access patients' live health data through a secured cloud platform. This enhanced caring model allows early data interpretation by PT for efficient clinical decision-making and optimal personalised care. A retrospective data analysis showed that 26 clients received the service in 2023, with a mean age of 72.3±6.9 years, and 70% had chronic obstructive pulmonary disease. There was no waiting time for tele-monitoring equipment setup. After a mean monitoring duration of 2.6±1.3 days, PT could generate reports in 2.6±2.1 days. 14 clients successfully titrated their oxygen therapy regimen. No safety issues were reported during the monitoring period.
Implication: Tele-monitoring service provided by hospital outreach team improves clinical effectiveness and efficiency. Community-dwelling elderly can thus receive follow-up at their doorstep while technology ensures vulnerable clients remain connected to the specialist team.

"Voice Restored, Hope Rekindled": a case report on assistive technology and community tele-rehabilitation for people with amyotrophic lateral sclerosis

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Background: This case report underscores the transformative potential of assistive technology and telerehabilitation in the life of a middle-aged patient with amyotrophic lateral sclerosis (ALS) in mainland China. Despite family support, the progressive loss of speech and motor abilities due to ALS created significant communication challenges and restricted his daily activities.
Objective: The report aimed to highlight how assistive technology and tele-rehabilitation can enhance social integration, self-confidence, and quality of family life for ALS patients in the community.
Practice: The patient was equipped with an eye-tracker and a new augmented alternative communication (AAC) platform, facilitating effective communication and the pursuit of personal hobbies. Monthly tele-rehabilitation follow-ups were conducted by professional teams from remote provinces to assess the patient's progress and the positive impact of these technologies. Feedback emphasised the significant role these technologies played in improving the patient's life and family dynamics.
Implications: Assistive technology and tele-rehabilitation are essential for community rehabilitation of ALS patients, fostering self-expression, social integration, and personal interests. The case study highlights how these tools can empower ALS patients to lead fulfilling lives, thereby demonstrating the effectiveness of the community tele-rehabilitation model.

Medication management and utilisation of community pharmacy service: a survey of Sha Tin residents in Hong Kong

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Objective: Needs assessment is crucial for planning the development of pharmacy services in primary healthcare in Hong Kong. This study aimed to understand drug management practices and utilisation of community pharmacy services by Sha Tin residents to explore potential pharmacy service development.

Methods: A self-administered survey was disseminated to members of Sha Tin District Health Centre Express (STDHCE) and non-members from March to May 2024. Anonymous data on demographics, use of chronic medications, medications for minor ailments, supplements, and Chinese medicines in the past year, treatment beliefs, health information-seeking habits, and community pharmacy service usage were collected.

Results: 733 responses were received. 94.1% were STDHCE members. 53.3% of respondents were aged 61-70 years, with a female-to-male ratio of 2.5. Over the past year, 52.0%, 89.8%, 67.3%, and 32.1% respondents used chronic medications, medications for minor ailments, supplements, and Chinese medicines, respectively. Among the chronically ill respondents, 16.0% would discontinue their drugs if they felt their symptoms were controlled, and another 57.2% reported suspected side-effects from medications. Doctors (56.5%) were the primary sources of advice on drugs or supplements. However, many respondents also turned to media (47.7%) and friends/relatives (31.1%), while only one-fourth consulted pharmacists (25.6%). Only 21.6% and 24.5% of respondents rated online information as useful and reliable, respectively. 40% of respondents were not aware of available community pharmacy services. Drug consultation (63.3%), education talks (51.8%), medication management for polypharmacy (49.9%), and minor ailment consultation (43.9%) were the most sought-after community pharmacy services. 87.9% respondents expected DHCE to provide pharmacy services.

Implication: The study reflects that while many respondents reported challenges in drug management, consistent and reliable professional support is often unavailable or overlooked. There is room for promoting and expanding pharmacy services to empower citizens, providing accessible and comprehensive care that enhances medication management and safety.

Risk factors for physical comorbidity in patients with severe mental illness: implications for integrated person-centred care in China

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Background: Patients with severe mental illness (SMI) often experience multiple physical comorbidities, but the separation of mental and physical healthcare limits timely, effective treatment, which adds to their disease burden. Integrated, patient-centred services within primary care and rehabilitation are urgently needed. In China, however, evidence on common physical comorbidities, their risk factors, and effective management strategies for patients with SMI remains limited.

Objectives: This study aimed to analyse comorbidities in patients with SMI, identify risk factors for different combinations of comorbidities, and explore effective management strategies within primary care and rehabilitation systems.

Methods: This mixed-methods study analysed medical records of patients with SMI in Beijing (2015-2019, n=66 050) using association rule mining to identify common physical comorbidities and patterns. Comorbidity data were then matched with 2994 cross-sectional survey records, and regression analysis identified risk factors for typical comorbidity patterns. Finally, 16 interviews with primary care and rehabilitation staff explored key challenges and strategies for managing comorbidities.

Results: Physical comorbidities were present in 71.17% of patients with SMI, with high consistency across six SMI types. The five most common conditions were arthritis (46.3%), hypertension (44.69%), heart disease (40.68%), diabetes (29.52%), and chronic bronchitis (27.97%), often occurring in similar combinations. Factors such as age, gender, health insurance, and family support were linked to the number of conditions, while specific risk factors influenced comorbidity patterns. Interviews highlighted challenges in integrated management, including limited awareness and difficulties securing patients' rights in primary care and rehabilitation.

Implications and Conclusions: The development of specialised care pathways that integrate the management of both mental and physical health conditions is urgently needed. In addition, the high prevalence and stable patterns of comorbidity in patients with SMI highlight the need for targeted allocation of primary care and rehabilitation resources based on common physical-mental comorbidity models.

Benefits and value of a multi-component group exercise programme in a Singapore nursing home: a programme evaluation study

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Background: Ren Ci Hospital manages over 1000 beds across three nursing homes in Singapore. Due to manpower constraints, a lack of structured exercise programmes, and low awareness of the benefits of physical activity, residents in nursing homes often have minimal opportunities to enhance physical wellbeing.
Objectives: To address these challenges, a structured, multi-component, 10-week exercise programme was introduced in one nursing home to assess its impact on residents' physical function. This was later scaled and adapted to a newly opened nursing home.
Practices: The programme was designed for resource efficiency and was led by two therapy assistants, who facilitated sessions for groups of up to eight residents. Each one-hour session, held twice weekly, included seated warm-ups, cool-downs, strengthening exercises for upper and lower limbs, standing balance activities, and a 2-minute ambulation. To ensure continuity, the programme was scheduled for two cycles annually, with a 12-week interval between cycles. To measure progress, the Short Physical Performance Battery (SPPB) and 2-minute walk test (2MWT) were conducted pre- and post-programme. Among the 43 residents who completed two cycles, 55.8% and 80% of participants showed improvement in their SPPB and 2MWT scores, respectively. Residents' attendance varied due to factors such as health status and availability in the nursing home, limiting their ability to attend sessions consistently. In the newly opened nursing home, make-up sessions were introduced within the week to address those who missed their sessions. Among the seven residents who participated, 71% improved in SPPB, and 100% showed gains in the 2MWT after the first cycle.
Implications: This exercise programme demonstrated promising improvements in residents' physical function and highlighted the importance of consistent participation. Led by therapy assistants instead of therapists, the programme also offers a potentially cost-efficient way of improving physical wellbeing among older adults in nursing homes.

Enhancing quality of life for older adults through adult foster care, case example in Finland

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As the population of older adults continues to grow globally, adopting innovative approaches to enhance the wellbeing of all citizens is essential. Finland, known for its inclusive welfare system, has been at the forefront of implementing adult foster care (AFC) programmes aimed at supporting older individuals in a home-like environment. This presentation will explore the framework, benefits, and challenges of AFC, focusing on its impact on the older adults and carers. Discussion will include the development, structure, and practice of AFC covering the regulations, standards, training, recruitment, and the process of matching caregivers with older adults. The presentation will highlight key benefits observed in AFC settings. The challenges of the AFC system, including the recruitment and retention of foster caregivers, financial sustainability, and quality assurance of care across different regions, will also be addressed. Case studies and current research findings to provide a comprehensive understanding of the real-world implications and outcomes of AFC for older adults in Finland will also be considered. The presentation will then explore how the AFC model could be adapted and implemented in Hong Kong and the interconnected regions of the Greater Bay Area. Cultural, economic, and policy factors that influence social and healthcare systems in these regions behind the strategies for integrating AFC within existing healthcare frameworks will be contemplated. Potential benefits, such as alleviating pressure on traditional care facilities and enhancing cross-border cooperation, will also be explored. Concluding with future directions, this presentation will offer arguments for policymakers, social and healthcare professionals interested in adopting a new alternative to better serve ageing populations. By examining Finland’s approach and considering its applicability to Hong Kong and the Greater Bay Area, important lessons may be learnt that could transform services and promote a higher quality of life for older adults across different cultural and economic contexts.

Examining the prevalence of intrinsic capacity decline among soon-to-be-aged and older adults

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Background: Cognitive function, mobility and nutrition are the three most common health concerns, especially for the ageing population. These three factors are also regarded as essential functional abilities which contribute to an individual's intrinsic capacity. In response to the advocacy of the World Health Organization (WHO) for healthy ageing, our research team has developed a series of interventions to improve the intrinsic capacity for vulnerable soon-to-be-aged and older adults.
Objective: To examine intrinsic capacity among soon-to-be aged and older adults without dementia.
Methods: The study is a secondary analysis utilising baseline data from a randomised controlled trial. Subjects were recruited from social media and met the following inclusion criteria: (1) aged 50 to 80 years; (2) living in the community; (3) with no diagnosis or treatment of dementia; and (4) proficiency in Chinese. Participants provided informed consent prior to the Integrated Care for Older People (ICOPE) assessment. The assessment was then administered by trained assessors using the WHO-recommended assessment tool and comprised three parts: a questionnaire covering demographic data and medical history; the ICOPE screening with nine questions across six domains of intrinsic capacity; and further full assessments for each domain, conducted only for participants who exhibited impairment in that domain.
Results: A total of 358 participants (72 male and 286 female, mean age=65.29±5.50 years) were recruited. More than 90% had issues in visual impairment (n=333; 93.02%), followed by hearing loss (n=256; 71.51%) and depressive symptoms (n=108; 30.17%). Cognitive decline (20.39%), malnutrition (12.57%) and limited mobility (12.01%) were also observed. The results showed that only 1.4% showed no decline across any assessed domains, 14.8% had declined in one domain, 40.5% had declined in any two domains, and over 43% displayed declines in at least three domains, indicating a significant incidence of multi-domain impairment.
Implications and Conclusions: This study underscores the widespread decline in intrinsic capacity among adults aged ≥50 years, with a notable portion experiencing multi-domain impairment. The results point to the importance of early detection and tailored interventions to address the specific needs of ageing individuals, particularly in visual and hearing impairment, which often receive insufficient attention. Future research should focus on developing comprehensive strategies to support intrinsic capacity and leveraging social media for broader public awareness and engagement in community settings.

Integrating support strategies in stroke management: the SAME Programme approach

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Background and Objectives: The Stroke Awareness, Management, and Empowerment (SAME) Programme (中風不求人自我管理計劃) aims to improve the management of hypertension, hyperglycaemia, and hyperlipidaemia in stroke survivors. These conditions are linked to a higher risk of recurrent strokes. By combining online and offline support, the programme enhances service users' confidence and encourages them to adopt sustainable self-management strategies, ultimately reducing the risk of stroke recurrence and improving cardiovascular health.

Practice: The SAME Programme is grounded in an empowerment approach that supports self-management. Key intervention components include health education, exercise classes, and a health coach who employs motivational interviewing techniques and a reward scheme to boost service user engagement. To enhance the delivery of the intervention, several key strategies are utilised, including social marketing for recruitment (eg, outreach through District Health Centres), referrals from an internal stroke team, and interdisciplinary collaboration among social workers, nurses, a digital development team, and exercise specialists. These strategies ensure a comprehensive support system for service users and foster a coordinated approach to health management. The programme specifically focuses on minor stroke survivors, a group often overlooked in follow-up care, providing specialised guidance on lifestyle changes and self-monitoring techniques.

Implications: Preliminary results indicate improved service user awareness and proactive health management. By addressing common misconceptions and promoting healthy practices, the SAME Programme is expected to significantly lower the risk of stroke recurrence and enhance long-term health outcomes. Future evaluations will gather service users' feedback and effectiveness data to refine the programme, ensuring it meets the needs of stroke survivors.

Application of ICF framework in designing community-based interventions for enhancing quality of life of chronic respiratory diseases patients

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Background and Objectives: Chronic respiratory diseases (CRDs) are prevalent in Hong Kong and significantly impact the lives of patients. Nevertheless, specialised and comprehensive community support for this group remains underdeveloped. This abstract discusses how the International Classification of Functioning, Disability and Health (ICF) of the World Health Organization can be adopted as a comprehensive framework to conceptualise the common needs and respective underlying causes of CRD patients to support the development of a case-based intervention protocol in the community.

Practice: Using the ICF framework, the service team developed an ICF-based client portfolio for CRD patients, drawing on their clinical experiences. They analysed common needs across various domains and their interrelationships to identify underlying causes. The team also identified key interventions addressing these needs with consideration of the root causes and mapped existing services. Two mechanisms merged: (1) Functional challenges (functioning and structure) coupled with low efficacy in symptom self-management (personal factors), often lead to anxiety/emotional distress (functioning), and subsequently results in withdrawal from community participation (participation); (2) Social isolation (participation) gradually results in poor social support (environmental factors), which in turn intensifies loneliness (functioning) and affects quality of life (personal factors). Based on these insights, intervention objectives were prioritised to improve CRD patients' self-management efficacy, emotional wellbeing, and social participation. A client-centred, 6-month case management plan was developed, including regular needs assessments and a range of services including symptom management education, lifestyle planning, counselling, and connecting clients with respiratory and social resources.

Implications: Preliminary findings indicate that CRD clients experienced reduced loneliness, increased confidence in symptom management, enhanced motivation for social participation, and improved quality of life. An evaluation study will follow to further refine this service and establish an evidence-based model for CRD patients in the community.

Feasibility, acceptability and the benefits of Wai Ji Match Fun card games on cognitive performance and psychosocial wellbeing for people with intellectual disabilities

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Background: A new set of card games called Wai Ji Match Fun (WJMF) has recently been developed by Wai Ji Christian Service (WJCS), a non-governmental organisation in Hong Kong. This set of card games was primarily designed for people with intellectual disabilities (ID), with features to facilitate their daily participation. Research has been done on the impact of serious games on people with ID, but most evidence lies in digital games instead of card-based serious games. The aims of WJMF were not only to improve their cognitive performance but also to promote their psychosocial wellbeing, which is an integral part of social integration.

Objectives: This study investigated the feasibility and acceptability of WJMF for people with ID. It also explored the benefits of psychosocial well-being and cognitive function in this population.

Methods: Sixty-four adult participants with mild or moderate ID were recruited through convenient sampling from their attending residential or day training service units. Weekly WJMF intervention groups, which lasted for 60 minutes, were conducted over an 8-week period. Each group consisted of four participants and was facilitated by an occupational therapist or rehabilitation assistant. Training and group protocol were delivered to facilitators to ensure standardisation across the 16 groups. Outcome measures included the attendance rate for feasibility and staff questionnaires at the end of the 8-week programme on acceptability. The Personal Wellbeing Index–Intellectual Disability (PWI-ID) (Chinese-Cantonese version) and the Prudhoe Cognitive Function Test (PCFT) short version were used to explore the benefits of WJMF. Data of these two measures was collected at four time points, including baseline, pre-test, post-test and follow-up.

Results, Implications and Conclusions: At the time of submission, the study was still at the intervention stage. Data collection and analysis are expected to be shared at the conference.

The root causes influencing patient self-help organisation (SHO) development by cross-SHO data and its application in SHO consultancy services

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Background and Objective: Patient self-help organisations (SHOs) are formed by patients with chronic illness or disabilities (and their caregivers) promoting mutual support by patients' initiating services. Their work can be evaluated by seven performance outcome indicators of sustainable development, eg, member recovery, for which 12 underlying best practices such as advocacy were deemed to be conducive to the attainment of indicators (CUHK, 2019). With the objective to enhance its applications, typically motivating SHO leaders to adopt more focused consultancy services, cross-SHO data were analysed in 2022 to derive the root causes affecting SHO performance.
Methods: In this study, two sets of questionnaires which were formulated to measure the aforesaid indicators and practices were delivered. Data from 22 SHOs and 330 members (36.4% of whom are executive committee members) were collected. Apart from scores of performances among SHOs and the overall SHO sector, multiple regression analysis was used to derive pivotal outcome and best practice inter-factorial relationships.
Results: Results indicated that: (1) Leading (leadership) and Laddering (ie, structured progression for members) are both fundamental practices that influence co-achievements of many other practices and ultimately outcomes; (2) Developing Core Services and Involving Members in Decision Making are the root causes enhancing community relationship and citizen support. Regarding applications in SHO Consultancy Services, follow-up consultancy with Windward Association for the Handicapped (Windward), one of the participating SHOs, was demonstrated to showcase the result application. A worker empowered core members to affirm or debunk any scores in the specified study report and communicated the areas for improvement and mechanisms to achieve them. As Windward wants to enhance community support, the worker advised to promote the existing self-help wheelchair repair service as its core service. Whereas Developing Core Services scored lower compared to average SHO, the use of leadership and laddering skills to enable more members to perform more roles in this service are discussed.
Conclusions: With the inter-factorial analysis, the research is practical for SHO leaders to use as reference and supplement for sustainable development of SHOs. Besides, it builds confidence for worker and SHO leaders to devote efforts to more specific domains of practice.

Co-creating a standardised job-related functional assessment tool for people with disabilities: a multiple stakeholder approach in a Chinese community

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Background: Job-related functional assessment tools for people with disabilities (PWDs) are crucial for job-matching services, enhancing their employment rate, and building an inclusive community. Non-Western literature on a standardised job-related functional assessment tool for PWDs remains limited.

Objectives: To reach stakeholder consensus on the job-related functional skills for PWDs and develop an assessment tool in a Chinese context.

Methods: Co-creation workshops were conducted with PWDs (n=15), employers (n=15), and helping professionals (n=15) to identify work-related functional skills based on the International Classification of Functioning, Disability, and Health (ICF). We identified 27 second-level categories as important functional skills in a job setting. Sixteen (59%) were from the activities and participation component; examples include communicating with spoken and non-verbal messages, speaking, conversation, learning to read and write, solving problems, undertaking single and multiple tasks, washing oneself, caring for body parts, toileting, basic interpersonal interactions, and relating with strangers. Nine (33%) were from the body functions component; examples include attention, orientation (time, place, person), consciousness, memory, seeing, hearing, and emotional functions. One (4%) was from the environmental factors component, which was labour and employment services, systems and policies. An additional code of self-efficacy (4%) was identified. Ninety statements were generated for the subsequent Delphi survey to reach consensus on the importance of job-related functional skills for PWDs. A two-round Delphi survey was conducted with 65 participants, comprising PWDs, employers, and helping professionals, to rate and re-rate the importance of job-related functional skills and develop the assessment tool.

Results: The final assessment tool included generic and disability-specific items, which would be further discussed.

Implications and Conclusions: A culturally valid and standardised job-related functional assessment tool for PWDs can improve job-matching services and increase their employment rate. The tool will be further tested through empirical studies in Asian communities.

Multimorbidity in Chinese older adults: health care burden and implications for chronic disease management

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Background: Multimorbidity is common among older adults, significantly increasing the burden of care and the difficulty of managing chronic diseases. Globally, there has been a gradual shift from single disease to co-morbidity management in chronic disease care. However, little is known about the patterns of multimorbidity and associated healthcare burden among older adults in China. This study aimed to fill this knowledge gap by investigating typical patterns of multimorbidity and different aspects of health care burden across these patterns.

Methods: This study used nationally representative data from the China Health and Retirement Longitudinal Survey collected in 2020. First, latent class analysis was used to identify typical patterns of multimorbidity. Binary logistic and linear regression models were then used to analyse factors associated with healthcare burden across different multimorbidity subgroups. Healthcare burden was measured in the burden on patients' health-related quality of life, and the burden on healthcare utilisation.

Results: A total of 8310 participants were included, with an average of 2.71 chronic conditions and a high multimorbidity rate of 69.60%. Four typical multimorbidity patterns were identified, including the high-prevalence multimorbidity group, the respiratory disease group, the cardiovascular and metabolic disease group, and the gastric disease and arthritis group. Compared with the low multimorbidity group, all these multimorbidity patterns were associated with lower health-related quality of life and higher healthcare utilisation. Factors such as age, income, health insurance and geographical location were all associated with healthcare burden in older adults, but their effects varied across multimorbidity patterns.

Conclusions: China's high multimorbidity rate in older adults escalates healthcare burden, with varying factors across multimorbidity patterns. Future policies on chronic disease management should allocate resources according to common and burdensome patterns of multimorbidity in the older population.

Effect of repetitive transcranial magnetic stimulation for managing neurogenic overactive bladder among stroke survivors: a randomised controlled trial

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Background: Neurogenic overactive bladder (NOAB) imposes significant distress on stroke survivors. NOAB management is invasive, expensive or lacks standardised regimens. Evaluating the effectiveness of repetitive transcranial magnetic stimulation (rTMS) for managing NOAB among stroke survivors remains crucial.

Objectives: To evaluate (1) effectiveness of active-rTMS compared to sham-rTMS in alleviating NOAB symptom severity, quality of life and resilience; and (2) cost-utility of active- and sham-rTMS interventions in NOAB symptom management.

Methods: A total of 110 stroke survivors with NOAB were screened for eligibility between January and December 2023, of which 60 were randomly allocated to either active- (n=30) or sham-rTMS (n=30) groups. Active-rTMS group received low-frequency rTMS of 1200 pulses/session, lasting 20 minutes at 80% active motor threshold, thrice weekly. Sham-rTMS group received 20% of the resting motor threshold stimulation. Primary (Overactive Bladder Symptom Score [OABSS]) and secondary (Incontinence Quality of Life Questionnaire [I-QOL] and Brief Resilience Scale [BRS]) outcomes were evaluated at baseline, primary (week 4) and secondary (week 8) endpoints. Analysis of covariance was used to analyse intervention effects on outcomes. Descriptive statistics estimated costs incurred in both groups.

Results: Participants' mean ages for active- and sham-rTMS groups were 62.10±9.54 years and 61.67±8.29 years, respectively. OABSS score changes were significantly improved in active-rTMS group compared to sham-rTMS at primary and secondary endpoints (p<0.001). I-QOL score changes demonstrated significant improvement in quality of life of active-rTMS group compared to sham-rTMS at primary and secondary endpoints (p<0.001). BRS score changes showed significant improvement in resilience in active-rTMS group compared to sham-rTMS group at primary (p=0.018) and secondary (p=0.002) endpoints. Mean cost of active-rTMS group was HK$1267.3 (95% confidence interval [95% CI]=1148.2-1386.5) compared to HK$1839.0 (95% CI=1654.2-2023.8) for sham-rTMS group.

Conclusions: rTMS intervention for stroke survivors could reduce NOAB symptom severity, improve quality of life and resilience. rTMS intervention could also lower the costs of managing NOAB among stroke survivors, leading to cost savings.

Effect of family-centred tele-rehabilitation for burn-injured children: a randomised controlled trial

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Background: Burn injuries in children impose significant burdens on family caregivers, particularly in China, where access to rehabilitation services is limited. Tele-rehabilitation may facilitate access to rehabilitation for children with burn injuries and reduce disability. However, evidence-based research on comprehensive tele-rehabilitation interventions for paediatric burns in China is lacking.

Objective: To investigate the effectiveness of a family-centred tele-rehabilitation programme for children with burn injuries and their caregivers.

Methods: A randomised controlled trial was conducted with children aged 3 to 6 years who had burn injuries and their caregivers. Participants were randomly assigned to a 12-week tele-rehabilitation programme or a routine discharge verbal rehabilitation education group. Measured outcomes included children's health-related quality of life using the Health Outcomes Burn Questionnaire (HOBQ); scar assessments via ultrasound for scar thickness and DermaLab Combo for transepidermal water loss (TEWL), pigmentation, hydration, and elasticity; and parents' perceived stress using the Perceived Stress Scale (PSS)–14.

Results: Forty-four children with burn injuries were recruited. Significant time-by-group interactions were found for the HOBQ total score (F=10.53, p<0.001), the itching and pain subscale (F=7.14, p<0.001), and scar metrics of hydration (F=3.34, p=0.022) and elasticity (F=4.17, p=0.015). The experimental group showed significant time effects on these measures (p<0.05). Post-hoc analyses revealed that HOBQ total and itching and pain scores at Weeks 4, 8, and 12 were significantly higher than at baseline. Hydration improved significantly at Week 12 compared to baseline. Elasticity improved significantly in the control group between baseline and Week 8. No significant main effects were observed for the parents' PSS-14 scores.

Conclusion: Training parents to provide family-centred tele-rehabilitation for children with burn injuries improves children's quality of life and scar outcomes. Further research is needed to explore methods to alleviate caregiver stress.

AUTHOR INDEX