

Breaking Barriers: A Collaborative Solution to Address the Aging Population Challenges in XiuLin Township, Hualien County

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Introduction

Population aging is a global challenge, especially evident in remote areas of Taiwan like Hualien County. Here, out-migration has heightened the number of elderly living alone, compounded by unequal access to medical resources. To tackle healthcare barriers, the government partners with local health centers and hospitals to offer mobile medical services. However, the key challenge remains motivating elderly individuals hesitant or unable to seek medical care outside their homes to prioritize their health for healthy aging. In 2022, the mobile medical service in Xiulin Township, Hualien County, established an "Integrated Clinic for Frail Older Adults." Through interdisciplinary collaboration, this clinic tailors assessment methods, interventions, healthcare services, case management, and family involvement to address elderly needs. Its goal is to enhance older adults' health literacy and foster self-health management in collaboration with healthcare teams.

Methods

In Xiulin Township, with a population of approximately 16,871, 23% are elderly individuals aged 55 and above. From July 2022 to 2023, 20 clinics, offering both physical and telehealth services, were established at the township's health center, targeting those aged 50 and above. Guided by the World Health Organization's 2019 "Integrated Care for Older People" (ICOPE) guidelines, advanced frailty assessments and interdisciplinary interventions were implemented to enhance older adults' health. Collaborative strategies included:

- 1.Cultural Sensitivity: Interviewing local health center teams and residents to raise cultural awareness.
- 2.Integrated Clinic Planning: Hospital geriatric specialists, aging care managers, health center chief physicians, and local nurses meet to discuss community and health center needs, aiming to customize services and enhance capacity.
- 3.Integrated Clinic Models:
 - (1)Comprehensive Case Management: Initial assessments, interventions, and six-month follow-up led to improvement.
 - (2)Resource Integration: Coordination among healthcare professionals, aided by shared transportation, reduced visits to remote health centers.
 - (3)Remote Tracking: Remote consultations for case management reduced transportation costs and increased patient willingness to seek care.
 - (4)Case Discussions: Regular collaboration between hospital care managers and health center nurses facilitated self-health management and medical visits for the elderly, improving healthcare access.
- 4.BI Visualized Indicators: Regular discussions using indicator data enable dynamic adjustments to service strategies and interventions.

Results

The integrated outpatient clinic has overseen 28 cases, with varying age distributions. Through the Clinical Frailty Scale (CFS) assessment, 21 cases were identified as pre-frail (75%) and 7 as frail (25%). Following six months of intervention, the outcomes are as follows:

- 1.Reassessment results: 12 cases were classified as healthy (43%), 11 as pre-frail (39%), and 5 as frail (18%), indicating hat early intervention can mitigate frailty
- 2.Improvement outcomes of team interventions:
 - (1)Nutritionists recommended dietary adjustments using the Mini Nutritional Assessment Short-Form (MNA-SF), resulting in 75% improving from malnutrition risk to normal intake, while 25% maintained the risk.
 - (2)Physical therapists conducted muscle strength and fall risk assessments and interventions for the elderly using the Short Physical Performance Battery (SPPB) assessment. Results showed a 54% improvement, with 32% unchanged.
 - (3)Case managers engaged in long-term interaction with the elderly, tracking cognitive function through the Mini-Mental State Examination (MMSE). 39% improved, while 32% remained unchanged.
- 3.For sustainable development and carbon reduction, the medical team travels 30 kilometers round-trip to the health center. Collaborating with the health center team, initial assessments are done there, while hospital professionals manage interventions and tracking. Sharing transportation annually cuts carbon emissions by 330 kilograms

Conclusion

The shift from a standalone clinic to an integrated care center, driven by cultural sensitivity and collaboration across institutions, reflects a patient-centered approach. Through joint community engagement and data analysis, unmet needs were identified, shaping a tailored care model and fostering partnerships. Continuous monitoring and intervention adjustments were facilitated by BI indicators. Improved care indicators positively impacted elderly individuals' access to care, self-awareness, and service efficiency, while reducing carbon emissions. Future efforts will involve collaborating with NGOs and community health centers to address identified needs using local resources and empower the elderly for healthier lives.

