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Brief Report

Facilitators and barriers of implementing the WHO ICOPE care model in Nepal: A clinical perspective

Ananta Aryal [a,#], Bineela Bhattarai [b,#], Saraswati Bhattarai [c,#], Urza Bhattarai [d,#], Milan Bhusal [e,#], Umesh Bogati [a,#], Anupama Gnawali [f,#], Ramesh Kandel [g,#], Pramod Kattel [h,#], Ashish Malla [i,#], Manish Kumar Mandal [j,#], Jagadish K. Chhetri [k,l,#,*]

[a] National Academy of Medical Sciences (NAMS), Bir Hospital, Kathmandu, Nepal
[b] Ramechhap District Hospital, Nepal
[c] Pipara Hospital, Nepal
[d] Hospital for Advanced Medicine and Surgery (HAMS), Kathmandu, Nepal
[e] Gulmi Hospital, Tamghas, Nepal
[f] Department of Emergency Medicine and General Practice, Patan Academy of Health Sciences, Nepal
[g] Rapti Academy of Health Sciences (RAHS), Nepal
[h] Rolpa Hospital, Reugha, Nepal
[i] Lumbini Medical College And Teaching Hospital, Nepal
[j] Shivraj Hospital, Nepal
[k] National Clinical Research Center for Geriatric Diseases, Xuanwu Hospital, Capital Medical University, Beijing, China
[l] Gerontology and Geriatrics Foundation of Nepal, Bhaktapur, Nepal

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ABSTRACT

Introduction: The Integrated Care for Older People (ICOPE) care model is being actively implemented worldwide, including in low-resource countries like Nepal. We aimed to conduct a survey to understand the major barriers and facilitators of implementing ICOPE in Nepal from a clinical perspective.
Methods: A survey questionnaire was developed to assess the barriers and facilitators of implementing ICOPE at the micro, *meso*, and macro levels and the recommended four steps of ICOPE. Relevant suggestions for improving ICOPE were also collected from the implementors.
Results: Among the 11 (ICOPE implementors) respondents, four were geriatricians and seven were non-geriatric clinicians. Lack of suitable infrastructure, shortage of trained workforce, comparatively low priority for geriatric health and geriatrics, lack of national guidelines and funding were considered the major barriers for implementing ICOPE in Nepal. Major facilitators for implementing ICOPE in Nepal were motivated healthcare workers, continuous support from the WHO, and government ICOPE training programs. Lack of a systematic referral framework with no provision of electronic health records and a dedicated team were considered as major barriers in completing the recommended four steps of ICOPE. The respondents thought the ICOPE application was feasible in Nepal, which could also serve as a tool to share health records digitally. Additionally, localisation of the ICOPE pathway was suggested.
Conclusion: The ICOPE care pathway was considered quite feasible in Nepal by the implementors, although more work is needed to remove the current barriers and embed ICOPE in the existing healthcare system.

1. Introduction

Nepal is a low- and middle-income (LMIC) country in South Asia, with significant geographic and resource constraints. Nepal has a population of about 30 million people and the majority of them are disadvantaged [1]. The country is divided by a federal structure with three tiers of government (federal, provincial, and local), and health services are primarily delivered by these tiers through government

* Corresponding author at: National Clinical Research Center for Geriatric Diseases, Xuanwu Hospital, Capital Medical University, Beijing, China.
E-mail address: chhetri_jk@hotmail.com (J.K. Chhetri).
# All authors contributed equally.

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health institutions, ranging from community health posts to district, zonal and tertiary hospitals. Specialized services, including geriatrics, are largely concentrated in a few tertiary centers, mostly located in urban areas and larger cities.

The number of older adults is growing rapidly worldwide, and Nepal is no exception. In Nepal, the average life expectancy reached 70 years in 2021, which is expected to be higher in the coming years [2]. Individuals over the age of 60 account for 10 % of the population, and the country is expected to be an aged society by 2054 [3]. There is a growing enthusiasm among healthcare workers and government bodies to find solutions to improve the lives of the older population in Nepal. However, with poor infrastructure, a handful of geriatricians, and very few organisations working on ageing, the government struggles to find ways to cope with the care needs of older adults, which are well-known to be different than younger populations.

Nepal is not the only low-resource country to face the healthcare challenges of the ageing population. Therefore, in 2015 the World Health Organisation (WHO) introduced the concept of intrinsic capacity (IC) to achieve healthy ageing [4,5]. This definition of healthy ageing proposes moving away from the traditional disease-based approach to a function-centred approach to meet the care needs of older adults, as people wish to be independent even in later life, irrespective of diseases. Supporting this framework of healthy ageing, WHO introduced the Integrated Care for Older People (ICOPE) care model in 2017 [6]. The ICOPE model aimed to deliver a continuum of integrated care that shifts health and social services toward greater personalisation and coordination. Since then, WHO has developed several guidelines for implementing ICOPE and has been a major agenda of the UN Decade of Healthy Ageing [7]. LMICs are particularly drawn to the ICOPE approach, as it could be easily implemented in low-resource settings. Nevertheless, the ICOPE care model is being tested worldwide [8–10].

The government of Nepal has been conducting ICOPE training programs mainly for healthcare workers serving in various government hospitals throughout the country. The seven formally trained geriatricians working in the country actively train other health professionals. During the first phase of the training, doctors (medical officers) were primarily trained, and other healthcare workers are being trained gradually on ICOPE. Implementation of geriatric-specific initiatives like ICOPE remains limited to pilot districts (Lumbini Province) and/or other research settings.

In this study, we conducted a survey of clinicians to identify the key difficulties and facilitators for implementing the ICOPE care model in Nepal. The results are extremely useful for all stakeholders to develop localised integrated care models nested in the ICOPE framework.

2. Methods

A survey questionnaire was developed eto assess the barriers and facilitators of implementing ICOPE in Nepal from the clinician's perspective, who are currently responsible for implementing ICOPE in various hospital settings in Nepal (Table 1). This questionnaire focused on identifying the major barriers and facilitators of ICOPE implementation at the micro, *meso*, and macro levels. The rationale behind this approach was to inform stakeholders about the major issues the implementors had faced. Furthermore, the survey included questionnaire on the difficulties the implementors were facing on the recommended four steps (from screening to implement and monitor) as suggested in the updated version of ICOPE, and what could be done to overcome these issues [11].

Suggestions were also asked on how to improve the implementation of ICOPE in the context of Nepal. Given that the world is moving towards digitalisation, the implementors were also asked about the feasibility of

Table 1
Survey questionnaire to assess the barriers and facilitators of implementing ICOPE in Nepal.

	Questions	Answers
1	Are you involved with older people in your day-to-day healthcare service?	1=mostly, 2=often, 3=few
2	How would you best describe your role in healthcare?	1=doctor, 2=nurse, 3=others (please specify)
3	Are you familiar with the concept of the WHO ICOPE model?	1=very familiar, 2=somewhat, 3=not much
4	What do you think are the major difficulties in implementing ICOPE at the micro (clinical) level in your region?	
5	What do you think are the major facilitators of implementing ICOPE at the micro (clinical) level in your region?	
6	What do you think are the major difficulties in implementing ICOPE at the *meso* (i.e., service delivery) level in your region?	
7	What do you think are the major facilitators of implementing ICOPE at the *meso* (i.e., service delivery) level in your region?	
8	What do you think are the major facilitators of implementing ICOPE at the macro- (i.e., system) level in your region?	
9	What do you think are the major difficulties in implementing ICOPE at the macro- (i.e., system) level in your region?	
10	In ICOPE Step 1 (screening), what are the major barriers? E.g., are the suggested methods easy to implement in your region? Please provide your suggestions on how to resolve and strengthen Step 1.	
11	In ICOPE screening Step 2 (in-depth assessment), what are the major barriers in your region? E.g., lack of system/infrastructure/time for follow-up, older adults do not want to come for follow-up, etc. Please provide your suggestions on how to resolve and strengthen Step 2.	
12	In ICOPE screening Step 3 (develop a personalised program), what are the major barriers in your region? E.g., lack of resources or others. Please provide your suggestions on how to resolve and strengthen Step 3.	
13	In ICOPE screening Step 4 (implement and monitor), what are the major barriers in your region? E.g., monitoring system and lack of coordination between stakeholders, etc. Please provide your suggestions on how to resolve and strengthen Step 4.	
14	In ICOPE screening Step 4 (implement and monitor), what are the major facilitators in your region? Please provide your suggestions on how to further strengthen those.	
15	If referral is required, is it easy for older adults? E.g., do they need to go through the whole process of the hospital?	1=very easy, 2=quite easy, 3=not easy (If 2,3, please suggest how to improve)
16	What is the status of community engagement to support older adults or in ICOPE care implementation?	1=very good, 2=quite good, 3=not good (If 2,3, please suggest how to improve)
17	Do you think the use of the ICOPE implementation application will facilitate the program?	1=strongly agree, 2=quite agree, 3 =not agree (If 2,3 please suggest why)
18	Do you think the use of the ICOPE implementation application is feasible in your region?	1=strongly agree, 2=quite agree, 3 =not agree (If 2,3 please suggest why)
19	Overall, how would you rate the current and near future applicability of implementing ICOPE in your region?	1=very good, 2=quite good, 3=not good (If 2,3, please suggest how to improve)
20	Do you have any additional suggestions for the improvement of ICOPE implementation in your region? E.g., incentivise healthcare workers, development of specific government programs for implementing ICOPE.	

Abbreviations: ICOPE, Integrated car for older people; IC, Intrinsic capacity.

the ICOPE application in the country, which is being routinely used in France [12]. A few other relevant questions, like referral difficulty and community engagement were included in the survey questionnaire. These questions were included as a large number of LMICs do not have a well-established referral system and they lack a mature community social support system too.

The survey questionnaire was sent to 11 doctors who have been working in Nepal at various levels of the healthcare system at different locations throughout the country. Among them, four were geriatricians, with an average of five years of experience in geriatrics after completing their postgraduate training. All of them work at tertiary care hospitals and were national-level ICOPE trainersand are also actively supporting the Ministry of Health in training non-geriatric healthcare workers.

The others were medical officers (completed undergraduate in clinical medicine and taken government jobs) with an average of three years of post-internship experience, working in outpatient and emergency settings, mainly in rural areas at primary health center level. They were involved in ICOPE screening in various districts over a 16-month period, and two had received official ICOPE training from the Ministry of Health and Population.

3. Results

Among the 11 respondents, seven were male, six of them described themselves as mostly involved with older people in their everyday clinical practice, while five of them described themselves as often seeing older patients. Eight of them rated themselves as very familiar with the ICOPE care model, while three of them as somewhat familiar.

3.1. Barriers and facilitators of implementing the ICOPE care model at different levels

Several barriers and facilitators at the micro, *meso*, and macro levels were identified (Fig. 1). In brief, at the clinical level, time constraints, unfavourable space, lack of trained workforce, no multidisciplinary team, referral difficulty, no provision for social support and social workers were considered major barriers. The Increasing number of healthcare workers trained on ICOPE by the government of Nepal programs with support from the WHO was suggested to be the major facilitator at the micro level. At the service level, lack of specialised geriatric clinics, no electronic health record system, lack of dedicated referral network/framework for older adults, poor awareness among clinicians and general population on preventive approaches were considered major barriers. Government programs on ageing, presence of large hospital networks, and effective community healthcare workforce were some of the suggested facilitators that can be used in ICOPE implementation at the *meso* level. At the macro level, lack of national guidelines for ICOPE implementation, lower prioritisation of geriatric care compared to maternal and child health and low budget allocation were thought to be the major barriers at the systemic level. The major facilitators were: the National Geriatric Health Strategy 2022, which gives a high priority to establishing geriatric care services at primary healthcare and the Nepalese health insurance policy is becoming more age-friendly, which means more older adults are accessing healthcare than before.

3.2. Barriers to implementing ICOPE in Nepal according to the recommended four steps in the ICOPE care model and suggestions to overcome the barriers (Table 2)

1) **Step 1 (Basic assessment and initial intervention):** Limited time in the crowded outpatient department was considered a major barrier for the screening of IC. Also, several other factors such as unfavourable space for IC screening, such as noisy rooms and a lack of equipment. Lack of patient awareness (e.g., patients do not understand why there is a different clinical approach instead of just focusing on the disease) and illiteracy were also some factors that were considered barriers in Step 1. ***Major suggestions***: It was suggested to develop an ICOPE model that fits into the cultural context of Nepal (including materials in the Nepali language). Introducing ICOPE in all medical curricula, incorporating IC screening in routine health checkup protocols and training more workforce was suggested to be important in implementing ICOPE in Nepal. Raising awareness among the general population on ICOPE care and function optimisation was also pointed out to facilitate ICOPE.
2) **Step 2 (In-depth assessment):** Poor infrastructure to support in-depth assessments (e.g., small rooms for measuring gait speed, no provision for further assessing vision and hearing) and lack of allied health specialists were the major barriers. Additionally, some tests, such as for cognition, were not considered suitable for assessing cognition in illiterate individuals. The lack of electronic medical record system in the healthcare system was a barrier to understanding previous assessments and the patient's health. Patient awareness and access to tertiary care were other factors that

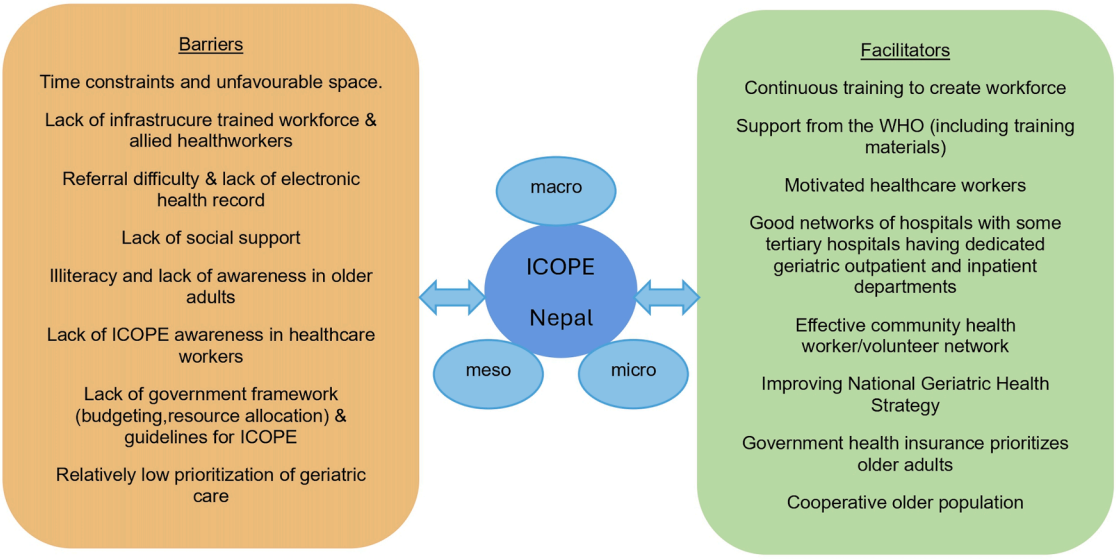

Fig. 1. Barriers and facilitators of implementing the ICOPE care model in Nepal at different levels.

Table 2
Barriers of implementing ICOPE in Nepal according to the recommended four steps and their respective suggestions.

	Barriers	Suggestions
Step 1 (Basic assessment and initial intervention)	1) Limited time, workforce and space during visits for screening. 2) Language problems. 3) Illiteracy problems. 4) Crowded and noisy government health institution settings. 5) Patients are not aware of function-centred approaches. 6) Comorbidity affects assessment.	1. Develop an ICOPE model that fits into the cultural context of Nepal. 2. Expand training and materials in Nepali. 3. ICOPE training to be included in medical curriculum. 4. Develop ICOPE banners, videos to raise general awareness on the early screening of IC. 5. Incorporate IC screening into other ongoing door-to-door programs. 6. Provide space suitable for geriatric assessment.
Step 2 (In-depth assessment)	1. Poor infrastructure to support comprehensive geriatric assessments. 2. Lack of social workers and allied health sciences (ophthalmologists, audiologists, nutritionists, rehab specialists, etc.). 3. Time and space constraints (e.g., small space not enough to assess gait speed or other related assessments). 4. Poor follow-up due to financial difficulty and access to higher levels of healthcare. 5. Difficulty in assessing illiterate people (e.g., clock drawing). 6. Lack of electronic health records for information sharing.	1. Provide regular training for doctors and nurses on comprehensive geriatric assessment. 2. Equip rural hospitals with basic diagnostic tools relevant to ICOPE and make provision for at least once per week specialist geriatric services in rural hospitals. 3. Assign dedicated team /case managers and use telehealth strategy (if required) to manage decline in IC. 4. Suggest tools for illiterates. 5. Develop local language tools. 6. Develop a dedicated multidisciplinary team. 7. In the absence of digital health records, IC screening cards to be incorporated in patient medical books(such as for vaccination). 8. Provision for mobile health units for outreach assessments in remote villages.
Step 3 (Develop a personalised program)	1. Lack of systematic referral systems (designated centre or person) and poor infrastructure for personalised care planning. 2. Lack of a multidisciplinary team, mainly for non-pharmacological interventions like physiotherapy or mental health counselling. 3. Lack of care coordinators or managers. 4. Lack of medications and dedicated spaces. 5. Transportation challenges for those in rural areas. 6. Financial challenges for some to reach the suggested centres for further evaluation. 7. Patient compliance is low for sensory interventions, e.g., for using a hearing aid or wearing glasses.	1. Need for a well-defined, dedicated referral centre (with responsible persons) and protocols. 2. Require provision for electronic health records. 3. Free or subsidised treatment at hospitals and rehabilitation facilities for optimising IC. If possible, provide relevant rehabilitation knowledge to general healthcare workers. 4. Incentives for preparing a personalised program. 5. Encourage local NGOs and community groups to offer community support services for older adults.
Step4 (Implement and monitor)	1. Lack of long-term vision/goals politically. 2. Lack of trained caregivers (formal/ informal) 3. Lack of funding to support such models of integrated care. 4. Lack of a monitoring mechanism. 5. Poor inter-sector coordination.	1. Develop a monitoring and evaluation framework. 2. Integration of health insurance and the Geriatric Social Security Fund. 3. Employ FCHVs, community health workers, and NGOs in monitoring and awareness programs with appropriate rewards. 4. Include ICOPE in all levels of medical education curriculum. 5. Develop telemedicine and routine online training programs.

Abbreviations: ICOPE, Integrated car for older people; IC, Intrinsic capacity; NGOs, non-government organisations; FCHVs, Female Community Health Volunteers.

significantly contributed to the completion of step 2. For e.g., patients who were in rural areas did not feel the importance to make a trip to the tertiary hospitals (which could be quite far and add a financial burden) for further assessment, as no specific diseases were diagnosed in step 1. At the same time, patients who were literate and financially sound (mainly in cities) chose to complete all steps.

Major suggestions: The implementors suggested developing locally suitable tools in the local language that are also suitable to assess the illiterate population. Dedicated centres for ICOPE care with multidisciplinary teams or the use of telemedicine in the absence of specialists was suggested. Awareness videos and pamphlets in the local language could be useful. Incorporating IC assessment pages in the patient's medical books (such as for vaccination) was suggested. For those who could not access healthcare, developing and utilising mobile health units was suggested. To overcome the lack of geriatricians in rural areas, it was suggested to run geriatric clinics at least once a week or once every few weeks.

3) **Step 3 (Develop a personalised program):** Lack of a systematic referral system (designated centres or persons) and poor infrastructure for personalised care planning were considered major barriers in step 3. Lack of multidisciplinary teams, mainly for non-pharmacological interventions like physiotherapy or mental health counselling, was also a difficulty in developing a personalised health program in Nepal. Some tertiary hospitals in Nepal have developed structured ICOPE pathways and trained teams, which shows the possibility of incorporating ICOPE in the existing healthcare system. Older people were also observed to be somewhat less compliant while using assistive devices. Financial burden was a major barrier to seeking further evaluation for many older individuals.

Major suggestions: It was suggested to develop well-defined dedicated referral centres and protocols with the provision of electronic medical record and deliver free or subsidised treatment at hospitals and rehabilitation facilities for those in need. If possible, provide relevant rehabilitation knowledge to healthcare workers which can be useful in the absence of specialists. The implementors suggested encouraging local NGOs and community support groups to offer assistive services for older adults. Incentivising healthcare workers for preparing personalised health programs for older individuals could be encouraging.

4) **Step 4 (Implement and monitor):** The implementors thought lack of long-term vision for geriatric health politically was a major barrier for continuing care models like ICOPE. No provisions of caregiver support, few opportunities to receive caregiver training and migration of younger family members who traditionally provided care and support to older family members were some of the additional barriers. Also lack of monitoring mechanisms/care managers was thought to be another difficulty.

Major suggestions: The implementors thought there was a great need for a monitoring system that would allow long-term health management of older individuals. It was suggested that integrating ICOPE care training in all healthcare curricula would raise awareness among healthcare workers and help create a trained workforce. In the lack of care managers, community health workers could be

mobilised in Nepal with proper incentives. Additional online training on geriatrics could always be useful.

3.3. Other survey points

3.3.1. Referral difficulty

The Majority of the ICOPE implementors thought referral of older individuals to other specialities was not easy. Few ($n = 5$) of them thought it was quite easy, as senior citizens are provided high priority in hospitals, therefore they should have faster access to services. They suggested developing priority referral pathways and single window services (sometimes people have to visit multiple windows before getting to specialists). For those with financial difficulty, it was suggested to provide transportation assistance or subsidies for referrals to distant facilities. Also, the use of telemedicine was suggested for those unable to go to referral centres.

3.3.2. Community engagement to support older adults

The implementors were asked how they felt about the current status of community support in their region, as it is a major factor in the ICOPE care model. The majority ($n = 8$) of them felt that community engagement was not good, while some ($n = 3$) of them felt it was quite good. They suggested mobilising the already active healthcare workers/volunteers and engaging local NGOs to focus more on supporting older people at the community level. Programs to encourage older people themselves to create self-support groups were proposed as a method to increase community support.

3.3.3. Feasibility of ICOPE application

It was considered that the ICOPE application (for cell phones/ tablets/ computers) could facilitate the implementation of ICOPE in Nepal. The implementors agreed strongly ($n = 9$) to this point, and few ($n = 2$) quite agreed. The participants thought such an application was feasible in Nepal (strongly agree $n = 5$ and quite agree $n = 6$).

3.3.4. Current applicability of implementing ICOPE

The respondents were asked about the overall applicability of implementing ICOPE in Nepal at the present time or near future. The majority of whom rated it to be quite good ($n = 9$), one of the respondents rated it to be not good, commenting that if the referral system cannot be well-established, it is not possible to implement ICOPE.

4. Discussion

In this study, we surveyed healthcare workers who were responsible for implementing ICOPE at different hospitals in Nepal. The survey intended to identify the major barriers to implementing ICOPE in Nepal and ways to overcome such difficulties from a clinical perspective. Factors like lack of infrastructure, workforce shortage, comparatively low priority for geriatric health and geriatrics, lack of national guidelines and funding were considered the major barriers. Motivated healthcare workers, support from the WHO, and government ICOPE training programs were considered to be the major facilitators in implementing ICOPE in Nepal.

The ICOPE care model centers around optimizing intrinsic capacity. A previous study has shown older adults in Nepal to have a very high (over 85 %) impairment in IC [13]. The rate of IC impairment is very high compared to neighboring country India and China [8,14,15]. Therefore, it is apparent that to reduce the consequences of functional impairment, care model such as ICOPE is deeply relevant for Nepal. Additionally, Nepal could represent a low-resource setting with a rapid increase of the older population, hence, the findings from our study could have high value for other similar settings countries. To our knowledge, this is the first study to investigate the barriers and facilitators of implementing ICOPE in LMICs. As expected, limited time and lack of suitable space to perform assessments were considered some of the major barriers in Nepal. Nepal's healthcare system has a network of hospitals at different levels, from villages to cities, and many of these hospitals are not well-equipped for IC assessment. The noisy environment and overflow of patients not only make it difficult for healthcare workers to conduct assessments, but also is difficult for them to describe to the patients what is being done and why it is being done. Dedicated geriatric clinics with suitable space and equipment were suggested to be necessary if the ICOPE care model was to be incorporated in routine healthcare practice. Some of the tertiary hospitals in Nepal working closely with the WHO have successfully developed a dedicated system to incorporate ICOPE in their routine clinical work.

Absence of the patient referral system was considered one of the most important barriers affecting the implementation of ICOPE, which is also largely unavailable in Nepal. The implementors suggested the development of systematic referral systems with designated centres and responsible persons. Such centres would need to have the necessary equipment and workforce to complete steps 2 and 3 (in some cases, step 1), leading to the development of a personalised care plan. It was also suggested to develop electronic health record system that would allow the sharing of information. In the lack of past results of IC assessment, it would be difficult for healthcare workers to know which domains to focus on; hence, it was suggested to include ICOPE-related pages on the back of patient medical books (e.g., for child vaccination). Furthermore, if it were possible to distribute a freely available ICOPE application that allows data sharing between stakeholders, it would solve many of the issues described above. Such an application is currently being used in France [12] and it was also thought to be feasible in Nepal.

Lack of stakeholder awareness, including healthcare workers and older individuals, is still large in Nepal. In order to implement ICOPE, it was suggested to develop programs to raise awareness on the importance of the ICOPE approach, both for healthcare workers and the general public. It was suggested to include ICOPE care training in all levels (for doctors, nurses and other healthcare specialists) of medical education. At the same time, the general public was observed to be hesitant, while the clinical approach was based on function instead of traditional disease-based clinical activities. Awareness videos and brochures should be disseminated by the government to promote this new model of care. At the moment, it was considered extremely time-consuming to provide an explanation for every patient in the busy outpatient settings. Doctors used techniques such as group assessments, so that patients can listen, observe and understand collectively, hence increasing efficiency.

One of the primary recommendations suggested by the participants was to localise ICOPE, in terms of language, assessment tools that could be used for illiterate individuals and setting a minimal service standard for ICOPE implementation. Such a suggestion was also provided in a previous ICOPE study in Taiwan [16]. Additionally, engaging local NGOs and pre-existing community health workers in providing community support to older adults was suggested. The increasing rate of youth migration in Nepal has left older individuals more exposed due to the lack of family caregivers, who traditionally provide care to older family members [17]. Indeed, engaging all forms of human resources would be more effective if they were to be rewarded. Provision of case managers may be required if we were to continuously manage older individuals' health and encourage them to access healthcare when in need, which was also shown to be effective in the China ICOPE study [10].

This study has several limitations that ought to be acknowledged. We included only a few numbers of doctors for this study. However, it should be noted that the inclusion of 11 key informants—including four trained geriatricians and seven medical officers directly involved in ICOPE screening—represents a substantial proportion of the national pool of relevant experts. This helps to ensure that our findings, though based on a small sample, may be insightful and represent key perspectives on ICOPE implementation in Nepal.ICOPE is a care model that includes multi-sector stakeholders andinput from other sectors,

particularly trained nurses and stakeholders from the macro level, could be of additional value. However, it should be noted that the ICOPE care model is still in its infancy in Nepal, and this study findings provide a vision of what lies ahead and the necessary preparations to be made. Indeed, future studies should include perspectives from all stakeholders.

Future directions: The Nepalese government should take in consideration to increase the geriatrics workforce for addressing the care needs of the growing older population. This could be achieved from Incorporating basic geriatrics in all medical curricula, developing post-graduate geriatrics training and specialised geriatric nurses training. Cooperation with international organisations with the know-how on managing geriatric syndromes could provide opportunities to train the general healthcare workforce in geriatrics. Government should implement stronger policies to equally prioritise geriatric care and geriatric medicine. IC assessment and management should be included in routine healthcare and covered by the health insurance. Research on ageing related issues and care models should also be prioritized for understanding the needs of older adults in the country and evaluating what actually works in the local context. Lessons could be learnt from past ICOPE studies in France [9] and China [10].Raising awareness on the importance of a function-centred approach to achieve healthy ageing is another important factor that needs to be prioritized. The government of Nepal should also focus on effectively accomplishing the agenda of Nepal's geriatric health strategy 2021–2030 [18], which aims to integrate geriatric care into the national health system, which should facilitate in resolving many barriers pointed by us.

5. Conclusion

The ICOPE care model proposed by the WHO is attractive for countries with low resources and an increasing ageing population. However, there are several barriers to overcome if we intend to embed ICOPE in the existing healthcare system of Nepal. Coordination between multi-sector stakeholders and a country specific ICOPE framework is needed to fully implement the ICOPE care model in Nepal.

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The survey results may be provided by the corresponding author on request.

CRediT authorship contribution statement

Ananta Aryal: Writing – review & editing, Resources. **Bineela Bhattarai:** Writing – review & editing, Resources, Investigation. **Saraswati Bhattarai:** Writing – review & editing, Resources, Investigation. **Urza Bhattarai:** Writing – review & editing, Resources, Investigation. **Milan Bhusal:** Writing – review & editing, Resources, Investigation. **Umesh Bogati:** Writing – review & editing, Resources, Methodology. **Anupama Gnawali:** Writing – review & editing, Methodology, Investigation. **Ramesh Kandel:** Writing – review & editing, Methodology, Investigation. **Pramod Kattel:** Writing – review & editing, Methodology, Investigation. **Ashish Malla:** Writing – review & editing, Methodology, Investigation. **Manish Kumar Mandal:** Writing – review & editing, Methodology, Investigation. **Jagadish K. Chhetri:** Writing – review & editing, Writing – original draft, Resources, Methodology, Investigation, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

[1] Tausig M, Subedi J. Aging in Nepal. Gerontologist 2022;62:803–8.
[2] Nepal datadot. Available at: https://data.who.int/countries/524. Accessed July 3, 2025.
[3] National consensus data 2078 Available at: https://censusnepal.cbs.gov.np/. Accessed July 3, 2025.
[4] Chhetri JK, Harwood RH, Ma L, Michel J-P, Chan P. Intrinsic capacity and healthy ageing. Age Ageing 2022;51:afac239.
[5] World Health Organization. World report on ageing and health. World Health Organization; 2015. Available at: https://apps.who.int/iris/handle/10665/186463. Accessed June 13, 2022.
[6] Integrated care for older people (ICOPE) Available at: https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/ageing-and-health/integrated-care-for-older-people-icope. Accessed July 3, 2025.
[7] WHO's work on the UN Decade of Healthy Ageing (2021-2030) Available at: https://www.who.int/initiatives/decade-of-healthy-ageing. Accessed July 3, 2025.
[8] Ma CHK, Chua DQL, Tay L, Teo EWC, Ng WC, Leung AYM. The feasibility of implementing the WHO Integrated Care for older People (ICOPE) Framework in Singapore. J Frailty Aging 2024;13:514–21.
[9] Tavassoli N, de Souto Barreto P, Berbon C, Mathieu C, de Kerimel J, Lafont C, Takeda C, Carrie I, Piau A, Jouffrey T, Andrieu S, Nourhashemi F, Beard JR, Soto Martin ME, Vellas B. Implementation of the WHO integrated care for older people (ICOPE) programme in clinical practice: a prospective study. Lancet Healthy Longev 2022;3:e394–404.
[10] Yan Wang N, Liu X, Kong X, Sumi Y, Chhetri JK, Hu L, Zhu M, Kang L, Liang Z, Ellis JW, Shi L. Implementation and impact of the World Health Organization integrated care for older people (ICOPE) program in China: a randomised controlled trial. Age Ageing 2024;53:afad249.
[11] Integrated care for older people (ICOPE): guidance for person-centred assessment and pathways in primary care, 2nd ed Available at: https://www.who.int/publications/i/item/9789240103726. Accessed July 3, 2025.
[12] Berbon C, Takeda C, Balardy L, Lafont C, Tavassoli N, Carrie I, Guyonnet S, de Kerimel J, Mathieu C, Pennetier D, Bezombes V, Nourhashemi F, Vellas B, Andrieu S, Soto-Martin M-E. Implementing the WHO ICOPE Program in Clinical practice: three years of lessons from monitoring 27 082 participants using the ICOPE monitor digital tool. J Gerontol A Biol Sci Med Sci 2025;80:glae278.
[13] Shrestha L, Neupane R, Paudel L, Manandhar N. Intrinsic capacity of older people in Panchkhal Municipality of Nepal: a cross-sectional study. Kathmandu Univ Med J (KUMJ) 2024;22:447–52.
[14] Rarajam Rao A, Waris M, Saini M, Thakral M, Hegde K, Bhagwasia M, Adikari P. Prevalence and factors associated with impairment in intrinsic capacity among community-dwelling older adults: an observational study from South India. Curr Gerontol Geriatr Res 2023;2023:4386415.
[15] Zhao J, Chhetri JK, Chang Y, Zheng Z, Ma L, Chan P. Intrinsic capacity vs. Multimorbidity: a function-centered construct predicts disability better than a disease-based approach in a community-dwelling older population cohort. Front Med (Lausanne) 2021;8:753295.
[16] Liang K-L, Liao C-C, Tsai P-H, Wu M-C. Impact of community Health Promotion programs on the well-being of older adults: a regional analysis of Taiwan's implementation of the WHO ICOPE Framework. J Appl Gerontol 2025. 7334648251348702.
[17] Chhetri JK. Youth migration in low-income countries: who is going to provide care for the frail older adults? J Frailty Sarcopenia Falls 2024;9:232–4.
[18] Kandel R. Nepal's Geriatric Health Strategy 2021–2030: a narrative review. J Indian Acad Geriatr 2024;20:141–3.