

Healthy aging and care of the older adult with chronic disease: a qualitative needs assessment in 14 eastern and southern Caribbean islands

Nancy VanDevanter,¹ Madeline Naegle,¹ Nasreen Nazia,¹ Avion Bamodu,² and Eileen Sullivan Marx¹

Suggested citation VanDevanter N, Naegle M, Nazia N, Bamodu A, Sullivan Marx E. Health aging and care of the older adult with chronic disease: a qualitative needs assessment in 14 eastern and southern Caribbean islands. *Rev Panam Salud Publica*. 2023;47:e40. <https://doi.org/10.26633/RPSP.2023.40>

ABSTRACT

The objectives of this qualitative needs assessment were to assess perceived needs of health and social services professionals in the Caribbean Region to enhance services supporting healthy aging and care of older adults and to assess perceived facilitators and barriers to increasing capacity to serve their aging populations. The assessment, informed by the Consolidated Framework for Implementation Science, was conducted in 14 islands in the eastern and southern Caribbean. The results demonstrated need for education of professionals and the general population about the prevention and treatment of non-communicable diseases (NCDs), assessment and services for individuals with dementia, Alzheimer's disease, depression, and harmful alcohol use, all of which pose significant challenges for older adults. Education of health and social services professionals, families, and the public on the risk factors for NCDs and common mental and physical health problems is critical. Barriers to implementation of educational programs include lack of community awareness and resources within the islands. The needs assessment findings are foundational to planning educational interventions. These will be developed by local health providers with the collaboration and support of external resources including those of the Pan American Health Organization/World Health Organization Collaborating Centre in Gerontological Nursing Education.

Keywords

Aging; population dynamics; needs assessment; West Indies; Caribbean Region.

Global aging has undergone dramatic changes since the 2002 Madrid International Plan of Action adopted at the Second World Assembly on Ageing (1). Its three priority action areas become more imperative with the rise in the percent of persons 65+ from 7-9% of the world's population, expected to reach 16% of the global population by 2050. In the Region of the Americas, adults 65+ make up 11 % of the population and life expectancy is around 81 years; by 2035 in the Caribbean, older persons will be 22% of the population (2). As this number increases, healthy aging is further compromised by pandemics such as COVID-19 and the prevalence of non-communicable diseases (NCDs). The Caribbean has the highest rates of death attributable to NCDs in the Americas, diseases that increase the likelihood of disability

and premature death (3). Those diseases in order of prevalence are heart disease (13%-25%), neoplasms (8%-25%), diabetes (4%-21%) and cardiovascular disease (1%-13%) (4). The 2010 UN resolution making NCDs a global priority urged initiatives to decrease risks like tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets (4). This needs assessment addresses these and three of the four action areas for the Decade of Healthy Aging: combating ageism, integrated (prevention to end of life) care and long-term care. In 2019, a UN report on aging from the Caribbean further noted the need reported by several island states for more efforts to improve the quality and monitoring of public and private health care services and residential homes for older persons and to insure access and receipt

¹ Rory Myers College of Nursing, New York University, New York, United States of America. ✉ Nancy VanDevanter, nvd2@nyu.edu.

² Caribbean Public Health Agency (CARPHA), Port of Spain, Trinidad and Tobago

of care to older adults, especially ethnic, religious, and sexual minorities (5). The global workforce shortage of those educated in healthy aging and geriatric care is of great concern. As in North America, there are few specialized health professionals (physicians, nurses, social workers, psychologists) working with older adults in the Latin American and Caribbean (LAC) region. Noting the failure of U.S. federal efforts to expand the ranks of health professionals specializing in elder care, Fulmer et al. (6) in a U.S. National Academy of Medicine special report, emphasized the importance of educating all health care providers in healthy aging and elder care. They stress the importance of technology not only to increase the depth and accessibility of training but also in health care delivery. The 2019 UN report describes continuing education programs for professionals and paraprofessionals in many island states, but most agency personnel note that these are infrequent and not widespread. This needs assessment explores the limitations of both fiscal and human resources which are well documented in the literature.

The objectives of this needs assessment were to assess perceived needs of health and social services professionals in the Caribbean Region to enhance services supporting healthy aging and care of older adults and to assess perceived facilitators and barriers to increasing capacity to serve their aging populations.

METHODS

Sample

The needs assessment was conducted in islands of the eastern and southern Caribbean Region in the fall and winter of 2020-2021.

Design

A qualitative cross-sectional needs assessment was conducted for islands within the Organization of Eastern Caribbean States (OECS), including Antigua and Barbuda, Commonwealth of Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines and the British Virgin Islands, as well as the southern Caribbean islands of Trinidad and Tobago, and Jamaica.

Theoretical framework

The Consolidated Framework for Implementation Research (CFIR) provided the theoretical framework for this study. For more than a decade CFIR has been used in multiple health care and social service settings to guide implementation of new practices (7-15). The CFIR is an overarching typology for identifying barriers and facilitators influencing successful implementation of a program or intervention. The CFIR is comprised of five domains: 1) Intervention Characteristics (Characteristics of the intervention that may influence success: If interventions are not adapted to the setting they will likely be resisted by the community), 2) Outer Setting (the economic, political, and social context within which an organization resides that may influence success), 3) Inner Setting (internal structural, political, and cultural contexts through which the implementation process will proceed), 4) Characteristics of Individuals (cultural, organizational, professional, and individual mindsets,

norms, interests, and affiliations), and 5) Process (the process by which the intervention is implemented). There are 39 constructs associated with specific domains. The domains and constructs represent a synthesis of a range of theories about dissemination, innovation, and implementation.

CFIR has proved to be a valuable tool to guide study design, data collection and analysis. The framework has been used to guide studies of interventions for weight control, tobacco cessation, alcohol cessation, asthma, nutrition, and dementia. In this study, we utilized CFIR to guide the development of the interview guide and the analysis to explore the perceived facilitators and barriers to implementation of programs to address healthy aging and care of the older adult with chronic disease.

Data collection

Potential participants were identified by public health and social services leadership in the Region. Individual and small group interviews were conducted by two experienced qualitative investigators who have previously provided training on healthy aging and care of older adults with chronic disease in the region. Both individual and small group interviews were conducted by one or both researchers who took detailed notes throughout the interviews. Interviews were conducted by telephone or Zoom depending on local communication systems.

Data analysis

Detailed interview notes were transcribed by a third member of the study team. Transcribed notes were read independently by two investigators to identify emerging themes. A code book was then developed that included the study aims: To identify personnel, resources, educational readiness, program implementation barriers and facilitators to providing services in support of healthy aging and care of older adults. These professionals identified by the health and social services leadership of the islands in the region were contacted by investigators by an email asking them if they would be willing to participate. After three emails those who responded affirmatively (90%) were contacted by phone or Zoom call depending on their preference, technology access and willingness to participate. Interview notes were transcribed by one of the investigators (NN) and kept in a locked file with access limited to only the investigators. The study was reviewed by the NYU Office of Human Research Compliance, a part of the NYU Institutional Review Board, and as a qualitative needs assessment with health and social services professionals did not meet the United States Federal definition of human subject's research as defined by 45 CFR Part 46, 102; thus the study did not undergo formal IRB review.

RESULTS AND DISCUSSION

Age trajectory for the region populations

All islands reported a significant growth in the older adult population due to some advances in treatment and prevention. Current life expectancy is 75.42 years (5). Many respondents reported increases in life expectancy over the last several decades due to improvement in diagnosis and treatment of NCDs. Most expressed the belief that treatment was improving

but that there is a need for greater emphasis on prevention through healthy lifestyle interventions. This should begin in the early middle years and include improved accessibility to comprehensive support services for individuals and families with chronic diseases.

Health priorities for the older adult population

Physical health. All needs assessment participants identified improved prevention and treatment of NCDs as high priorities. The most common health issues/diseases identified were obesity, diabetes (diabetic retinopathy, amputation due to diabetes), hypertension, and heart disease. Cancer and kidney disease are less common but very costly. In addition, osteoporosis and auto-immune diseases often require resources that are scarce. The development of most of NCDs can be attributed to lifestyle and diet. Participants suggested that there is a need for well-developed educational materials and in-person courses as well as webinars to educate older adults, health and social service professionals, caregivers of older adults, and the general public. Several participants also noted tobacco use as more of an issue for older, versus younger adults making it a lifetime habit more difficult to quit.

Mental health. Dementia, Alzheimer's disease, depression, and harmful alcohol use were all identified by all participants as challenges for older adults. Cultural beliefs and stigma inhibit reporting and correct assessment of their prevalence. Social isolation of older adults was identified as a significant contributor to mental health challenges like depression, substance use and isolation across the region. There is a critical need to educate health professionals, families and the general public about common mental health problems in older adults. Many older adults live alone and even when social services are available, it is only for a limited number of hours in a day. In situations where children have emigrated, older adults must rely on social services and friends.

Educational and program needs

Overall, the need for community resources and centralized information for resources is evident. The need for more educational programs targeting health and mental health professionals as well as family and community care providers was strongly articulated by all participants; these should address prevention, diagnosis, and treatment of NCDs and mental health issues. Information on the WHO/PAHO Healthy Caribbean initiative was cited by respondents. The need for the recognition of cognitive changes and differentiating among types of cognitive disorders were consistently cited. All health professionals should screen for mental health diagnoses in standardized ways. Several participants noted that many health and social services providers do not receive education on healthy aging and care of the older adult in their basic educational preparation. In addition, pay is very low for caregivers of older adults with disabilities, dementia, and mobility issues. Many participants also identified a need for public education about normal changes associated with the life course. Participants articulated the need for educational programs for caregivers of older adults to help them cope with the challenges identified in the Needs Assessment. Proposed educational programs included:

- Planning for retirement from early career and employment
- Training for medical caregivers and family members on signs of cognitive disorders
- Capacity building to disseminate information and conduct training are further compromised by a) lack of access to technology, and b) lack of education on use of technology for learning purposes. The learning lags and slow shift to greater technology use on many islands have impaired health education initiatives especially for the elderly and many of the caregivers in both care homes and clinical settings.
- Aging education. At the present time, most island governing structures lack units dedicated to Aging in the Health Ministry. The result is few formal advocates for older adults and few persons in government agencies to champion their causes. The interviewees see a great need for expanded analysis of these situations, and organizational units that are more team based, organized and inclusive of all stakeholders.

Internal resources

Along with the gaps in services for the older adult population, participants also identified some local community and regional resources that have been implemented for healthy aging and care of the older adult. In 2007, the Heads of Government of the Caribbean Community (CARICOM) made a collaborative declaration calling for action to address NCDs in the region. CARICOM members and other Caribbean islands issued a call to action throughout the region to highlight the critical importance of addressing NCDs.

Individual islands have implemented some programs that provide a framework or models for further development in the region. Activities of individual island states alone or in collaboration with other islands are highlighted below as exemplars, although this is not a complete listing of all healthy aging programs.

The island nation of **St. Lucia** is home to the OECS and a leader in this region for aging and other health related issues. St. Lucia is among the islands with the largest populations. They work closely with University of the West Indies where there is a Conference on Aging, and they lead some of the initiatives in OECS. There are a growing number of policies and programs on aging populations. Psycho-social wellbeing and mental health are important for this population. Because of St. Lucia's role in the OECS they have strong connections throughout the region and the ability to identify and collaborate with other island members extensive experience in gerontology and in the PAHO/WHO ICOPE training on care of the older adult.

British Virgin Islands are a group of four main islands with a total population of about 30 000. One participant in the needs assessment noted "While there are significant problems financially and health wise for older adults, the elderly are beloved in our society and will be taken care of."

St. Kitts reported the development of some social programs for older adults. One is an active social enrichment program, and another is a formal program for home based older adults. These programs are staffed by community health workers who have had training from Department of Social Services (DSS). Other resources for older adults in St. Kitts are "Golden age clubs" and the Ministry of Health (MOH) provides education on health promotion through social media, courses, materials. **Nevis** has

TABLE 1. External resources identified to meet educational needs

Resource	Scope
NYU Meyers Hartford Institute for Geriatric Nursing (HIGN)	Website and online learning resources on health and aging and common geriatric conditions. An extensive menu of on-line learning programs at two levels 1) community-based adults and their care givers 2) health care professionals
NYU Meyers graduate and undergraduate geriatric faculty experts	Faculty conduct research and serve as consultants on long term care, primary care and chronic illness in older adults.
PAHO/WHO Nursing and Midwifery Collaborating Centers (CCs); Global Network of Nursing and Midwifery CCs Other WHO Aging CCs	The goals of these networks include regional and international consultation by experts in nursing and other disciplines. Research colloquia and regional meetings are held in the PAHO region and provide opportunities for information sharing and knowledge dissemination.
John A. Hartford Foundation located in New York City	Investment in training and innovative care models to improve the quality-of-care delivery to older adults.

a program with community health workers (CHWs) for older adults trained by University of the West Indies (UWI), although few providers have advanced training in aging or geriatric care. These community health workers can see older adults at home three days per week. The program has 15 field offices around the island. Caregivers know how to lift persons from the bed, how to feed, change up-pampers etc. These CHWs have skills to care for older adults “though we do try to encourage family members to play a major role in the care.”

The island of **Dominica** has several support groups for families with older adults with dementia. The dementia program “*Yes we care*” is currently active, though the scope of the program is unclear. There is also an organization “*Dementia is friends*.” A new program has just been started that focuses on getting young people to volunteer but they are struggling with funding. The scope of its activities is unclear. There is a Dominican Counsel on Aging.

Though there are no day programs for people with dementia there are several care homes for these patients. There are few public care homes but a growing number of private homes.

Trinidad and Tobago are two islands that have somewhat different political structures; the combined population is about 1.3 million. Because of size, programs there have been more fully developed. The government has put in place a program that provides assistance for individuals with chronic disease. It serves the older adult population as well as younger persons with chronic diseases. A number of senior health and social service leaders have successfully advocated to make aging a focus for the government and health departments.

In **Jamaica**, an agency provides training for caregivers as does as the Ministry of Health. Though Jamaica is further along in the development of programs to address issues of healthy aging and care of the older adult, there is a need for more interdisciplinary collaboration and education about the natural process of aging. The introduction of the Healthy Caribbean program has not been followed with sufficient education for the public or health professionals. The University of the West Indies Aging Program is mentioned by many islands as a resource for healthy aging and care of older adults.

The education of individuals, families and care givers could be delivered by local nurses if they receive formal geriatric education through one of the resources above and/or local education provided through the CARICOM, OECS, UWI aging program and other local geriatric education programs. Next steps include developing an approach to providing educational programs for health and human services providers in collaboration with the Caribbean leaders.

CFIR barriers and facilitators to implementation of services for the aging population

Primary barriers identified by participants are lack of internal resources for education and programs and low community awareness of the aging of the population. Internal facilitators to education interventions are commitment to and respect for older adults as well as external educational resources including PAHO, Meyers Hartford Institute for Geriatric Nursing, and John Hartford Foundation.

The CFIR provided a valuable framework for assessing the environment for introducing education programs regarding healthy aging and the care of older adults with chronic disease. It also confirmed the assessment from the literature regarding the extent of the needs for such a program (13-15).

External resources required to address the needs of the growing aging population were also identified and are shown in Table 1.

This study demonstrated the deep concern that health and social service providers in the islands have for this vulnerable and growing population. As a qualitative study, however, it is subject to some important limitations. Sample size is limited, subjects may be biased, the group agreeing to participate may not represent the viewpoint of the larger group, and the researchers may also be biased. To address these limitations, we included a large group of geographically diverse islands. Those recruited had the option of not participating; however, 90% did agree. In addition, the findings were very consistent across islands despite the differences in populations. To address investigator bias, two investigators read the verbatim transcribed notes and achieved 89% consistency in coding of data.

In conclusion, this needs assessment identified significant educational needs of health and human services providers in the Caribbean islands regarding healthy aging and care of the older adult with chronic diseases, in particular for NCDs, depression, dementia and substance use. Many participants highlighted the need for an increase in health promotion activities and educational programs for this population of older adults and for the community in general.

The assessment also identified barriers and facilitators to implementation of educational programs to enhance care of the older adult for healthy aging and care of those with chronic disease. Participants identified a lack of knowledge about normal changes in community dwelling older adults that occur over the life course. The need to understand the treatment and clinical management of common conditions/illnesses in older

adults in the community and care settings was evident. In June 2021, WHO convened the first conference focused on island health. Outcomes noted that all islands face challenges with lack of health infrastructure, logistical difficulties obtaining supplies (equipment, medications, etc.), and the ability to train and retain physicians, nurses, and other health professionals. These problems are mirrored in the testimony of needs assessment participants.

NYU Meyers College of Nursing will work with NYU Meyers Hartford Institute for Geriatric Nursing and the other identified external resources and with each of the participating islands to support achieving the goals identified by PAHO and WHO for the Decade of Healthy Aging, by developing and implementing learning tools for health and social services organizations, as well as tools for community education.

Author contributions. NV and MN conceptualized the study, developed the proposal and interview instrument, and conducted the interviews with the participants. NN developed verbatim transcripts of detailed interview notes. MN and NV conducted the data analysis and drafted the paper. SM and AB reviewed and commented on paper drafts of the findings and made suggestions for revision.

Conflict of interest. None declared.

Disclaimer. Authors hold sole responsibility for the views expressed in the manuscript, which may not necessarily reflect the opinion or policy of the Revista Panamericana de Salud Pública / Pan American Journal of Public Health and/or those of the Pan American Health Organization.

REFERENCES

1. United Nations. Madrid International Plan of Action on Ageing. New York: UN; 2002. Available from: <https://www.un.org/development/desa/ageing>
2. Ham-Chande R, Nava-Bolaños I. Convergence Toward Demographic Aging in Latin America and the Caribbean. *Annu Rev Sociol.* 2019;45:607-623.
3. Razzaghi H, Martin DN, Quesnel-Crooks S, Hong Y, Gregg E, Andall-Brereton G, et al. 10-year trends in noncommunicable disease mortality in the Caribbean region. *Rev Panam Salud Publica.* 2019;43:e37. Available from: <https://doi.org/10.26633/RPSP.2019.37>.
4. Alleyne G, Stuckler D, Alwan A. The hope and the promise of the UN Resolution on non-communicable diseases. *Global Health.* 2010;6:15. Available from: <https://doi.org/10.1186/1744-8603-6-15>.
5. United Nations. World Population Ageing 2016: Highlights - the United Nations. New York: UN; 2019.
6. Fulmer T, Reuben DB, Auerbach JB, Fick DM, Galambos C, Johnson KS. Actualizing better health and health care for older adults. *Health Aff.* 2021;40:2. Available from: <https://doi.org/10.1377/hlthaff.2020.01470>.
7. Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Sci.* 2009;7(4):50. Available from: <https://doi.org/10.1186/1748-5908-4-50>.
8. Louie E, Barrett EL, Baillie A, Haber P, Morley KC. A systematic review of evidence-based practice implementation in drug and alcohol settings: applying the consolidated framework for implementation research framework. *Implementation Sci.* 2021;16(22). Available from: <https://doi.org/10.1186/s13012-021-01090-7>.
9. VanDevanter N, Vu M, Nguyen A, Nguyen T, Van Minh H, Nguyen NT, Shelley DR. A qualitative assessment of factors influencing implementation and sustainability of evidence-based tobacco use treatment in Vietnam health centers. *Implementation Sci.* 2020;15(73). Available from: <https://doi.org/10.1186/s13012-020-01035-6>.
10. VanDevanter N, Zhong L, Dannefer R, Manyindo N, Walker S, Otero V, et al. Implementation facilitators and challenges of a place-based intervention to reduce health disparities in Harlem through community activation and mobilization. *Front Public Health.* 2022;10:689942. Available from: <https://doi.org/10.3389/fpubh.2022.689942>.
11. Means AR, Kemp CG, Gwayi-Chore MC, Gimbel S, Soi C, Sherr K, et al. Evaluating and optimizing the consolidated framework for implementation research (CFIR) for use in low- and middle-income countries: a systematic review. *Implementation Sci.* 2020;15,17. Available from: <https://doi.org/10.1186/s13012-020-0977-0>.
12. Shade L, Ludden T, Dolor RJ, Halladay J, Reeves K, Rees J, et al. Using the Consolidated Framework for Implementation Research (CFIR) to evaluate implementation effectiveness of a facilitated approach to an asthma shared decision making intervention. *J Asthma.* 2021;58(4):554-563. Available from: <https://doi.org/10.1080/02770903.2019.1702200>.
13. Wilcox S, Jake-Schoffman DP, Saunders RP, Kinnard D, Kaczynski AT, Hutto B, et al. Predictors of implementation in the Faith, Activity, and Nutrition dissemination and implementation study: application of the Consolidated Framework for Implementation Research (CFIR) in a statewide initiative. *Transl Behav Med.* 2021;11(2):419-429. Available from: <https://doi.org/10.1093/tbm/ibaa025>.
14. Coffey A, Hartigan I, Timmons S. Implementation of evidence-based guidance for dementia palliative care using participatory action research: examining implementation through the Consolidated Framework for Implementation Research (CFIR). *Implement Sci Commun.* 2021;137. Available from: <https://doi.org/10.1186/s43058-021-00241-7>.
15. Rodriguez-Pinzon D. Inter-American convention on protecting the human rights of older persons. *International Legal Materials.* 2016;55(5):985-1006. Available from: <https://doi.org/10.1017/S002078290000437X>.

Manuscript submitted on 15 May 2022. Revised version accepted for publication on 9 September 2022.

Envejecimiento saludable y atención de las personas mayores con enfermedades crónicas: evaluación cualitativa de las necesidades en 14 islas del Caribe oriental y meridional

Resumen

Los objetivos de esta evaluación cualitativa de las necesidades fueron evaluar las necesidades que perciben los profesionales de la salud y de los servicios sociales en el Caribe a fin de mejorar los servicios de apoyo al envejecimiento saludable y el cuidado de las personas mayores, así como evaluar los factores percibidos como facilitadores y como obstáculos para mejorar su capacidad de atender a la población que está envejeciendo. La evaluación, basada en el marco consolidado para la ciencia de la implementación, se realizó en 14 islas del Caribe oriental y meridional. Los resultados mostraron la necesidad de capacitar a los profesionales y educar a la población en general acerca de la prevención y el tratamiento de las enfermedades no transmisibles (ENT), la evaluación y los servicios para las personas con demencia, Alzheimer, depresión y problemas de consumo nocivo de alcohol, todos los cuales plantean importantes desafíos para las personas mayores. Es imprescindible capacitar a los profesionales de la salud y de los servicios sociales, así como educar a las familias y al público en general sobre los factores de riesgo de las ENT y los problemas de salud mental y física más habituales. Entre los obstáculos a la aplicación de los programas educativos se encuentran la falta de concientización de la comunidad y la falta de recursos en las islas. Los resultados de la evaluación de las necesidades son fundamentales para planificar las intervenciones educativas, que serán formuladas por los prestadores de atención de salud locales con la colaboración y el apoyo de recursos externos, incluidos los del Centro Colaborador de la Organización Panamericana de la Salud/Organización Mundial de la Salud en Educación en Enfermería Gerontológica.

Palabras clave Envejecimiento; dinámica poblacional; evaluación de necesidades; Indias Occidentales, Región del Caribe.

Envelhecimento saudável e atenção à pessoa idosa com doença crônica: avaliação qualitativa das necessidades em 14 ilhas do Caribe oriental e meridional

RESUMO

Os objetivos desta avaliação qualitativa das necessidades foram avaliar as necessidades percebidas do pessoal da saúde e dos serviços de assistência social na região do Caribe, visando a melhorar os serviços de apoio ao envelhecimento saudável e de atenção às pessoas idosas e determinar os facilitadores e as barreiras percebidos, com vistas a melhorar a capacidade de prestar assistência às populações idosas. Esta avaliação foi realizada com base na *Consolidated Framework for Implementation Science* em 14 ilhas do Caribe oriental e meridional. Os resultados obtidos demonstraram que é necessário prover conhecimento aos profissionais e à população geral sobre a prevenção e o tratamento de doenças não transmissíveis, e a avaliação de pessoas com demência, doença de Alzheimer, depressão e uso prejudicial de álcool e os respectivos serviços, visto que são enormes desafios enfrentados pelas pessoas idosas. É fundamental que o pessoal da saúde e dos serviços sociais, os familiares e o público em geral conheçam os fatores de risco para doenças não transmissíveis e os problemas comuns de saúde mental e física que afligem a população idosa. A falta de sensibilização da comunidade e a escassez de recursos são barreiras à implementação de programas educacionais. As conclusões desta avaliação servem de base para o planejamento de intervenções educacionais a serem desenvolvidas localmente pelo pessoal da saúde, com a colaboração e o apoio de entidades internacionais, como o Centro Colaborador da Organização Pan-Americana da Saúde/Organização Mundial da Saúde para Educação em Enfermagem Gerontológica.

Palavras-chave Envelhecimento; dinâmica populacional; determinação de necessidades de cuidados de saúde; Índias Ocidentais; Região do Caribe.
