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The role of assessment in competence-based gerontological advanced practice nursing

El papel de la evaluación en la enfermería de práctica avanzada gerontológica basada en competencias

O papel da avaliação na prática avançada de enfermagem gerontológica baseada em competências

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ABSTRACT

Population aging challenges healthcare systems, requiring gerontological advanced practice nurses (GAPN) to address specific and complex care requirements of older adults. GAPN implement evidence-based practices directed to patients and families, focusing on health promotion and protection, disease prevention, recovery, and rehabilitation. In competence-based gerontological advanced practice, comprehensive geriatric assessment is essential for implementing the care plan. In this theoretical essay we reflect about the role of assessment in competence-based advanced nursing practice directed to the care of older adults. From our perspective, geriatric assessment for a high-quality practice must be comprehensive, multidimensional, interdisciplinary, and planned. GAPN must have solid competencies for clinical skills and caring practices; education for health literacy; collaborative care; system management for continuity of care; ethics, advocacy, and moral agency; and evidenced-based practice inquiry. Gerontological models of care and GAPN competencies serve as frameworks to guide practice while assessment is fundamental for providing age-friendly care to older adults.

DESCRIPTORS

Aging; Geriatric Nursing; Advanced practice nursing; Clinical competence; Models, Nursing; Nursing Assessment.

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INTRODUCTION

Population aging is a worldwide phenomenon characterized by the increase in the number of people aged over 65 years in relation to other age groups. Data from the World Health Organization shows that the number of older adults on the globe is projected to double in the next three decades; it is estimated that 16% of the world's population will be older than 65 years in 2050[1].

The aging of the population, with an increasing number of individuals living with multiple chronic conditions and complex care needs, challenges healthcare systems that require a workforce ready to address these challenges. There is a dire need for gerontological nurses and important opportunities especially for gerontological advanced practice nurses (GAPN)[2] to address specific needs of older adults, which are usually complex.

Older adults need comprehensive care, including biological, psychological, and social perspectives according to their aging specificities. The quality of nursing care is significant to address the fact that older adults tend to have more functional decline, disabilities, and adverse events during hospitalization[3–5]. A GAPN is crucial to ensure that the health care needs of older adults are addressed[2], both in terms of assessment and in terms of implementation of comprehensive care to patients, families, and caregivers[6]. Gerontological advanced practice nurses implement evidence-based practices directed to patients and families, focusing on health promotion and protection[6], disease prevention, recovery, and rehabilitation. Competence-based gerontological advanced practice nursing requires comprehensive gerontological assessment (CGA), mainly since CGA is associated to decreased length of hospital stay, reduced mortality, and increased chance of home discharge[7]. Health care providers must be sufficiently competent to provide high-quality care to older adults using evidence and different care models[6]. This theoretical essay aimed to reflect about the role of assessment in competence-based advanced nursing practice directed to the care of older adults.

GERONTOLOGICAL MODELS OF CARE

Multiple gerontological models of care, developed in the United States, exist for individuals and/or health care organizations to incorporate and adapt for their specific needs. The Nurses Improving Care for Healthsystem Elders (NICHE) Program, based at New York University Rory Meyers College of Nursing, is a nursing education and consultation program aimed at improving geriatric care in health care organizations. It provides resources, leadership training, and mentorship for nursing and interprofessional teams to achieve organizational goals in care of older adults. Evidence shows that the program is promising for the care of older adults[8]. More information about the NICHE program can be found at https://nicheprogram.org.

Acute Care for the Elderly (ACE)[9], originally developed at University Hospitals in Cleveland, Ohio, is an inpatient model of care which seeks to restore older adults to their optimal level of functioning and prevent negative health outcomes. It incorporates principles of interprofessional comprehensive geriatric assessment and quality improvement. Physical environment enhancements for ACE units may include increased lighting, lower beds, changes in floor patterns to promote mobility and to decrease wandering, as well as a nightly fiber cookie or other nutritional item to decrease the risk of constipation. An ACE unit adapted to a designated hospital is a mobile ACE unit where a geriatric interprofessional team provides consultation to older adults throughout a hospital instead of only on one unit.

The Transitional Care Model (TCM) is based at the NewCourtland Center for Transitions and Health at the University of Pennsylvania School of Nursing. Several time-limited services are designed to ensure health care continuity and prevent poor outcomes among populations at high-risk as they move across levels and settings of care and among multiple interprofessional care team members. Examples of transitions include going from the hospital to home, hospital to short-stay rehabilitation to long-term care. Consultation is available to help organizations customize a transitional care model program to meet their needs and quality improvement efforts. More information including groundbreaking research, practice, and policy implications may be found at https://www.nursing.upenn.edu/ncth/transitional-care-model. Some ongoing trials are testing the program effectiveness[10,11].

The Programs for All-Inclusive Care for the Elderly (PACE) provides comprehensive care to older adults living in the community in the U.S., most of whom are dually eligible for Medicare and Medicaid benefits. Eligibility criteria include being aged 55 years or older, being certified by their residential state for nursing home-level of care, and being able to be cared for safely in the community at time of enrollment. The program provides interprofessional, team-based, coordinated care with needed medical and social services to allow older adults to age safely in the community. Information may be found at "https://www.medicaid.gov/medicaid/ltss/pace/index.html". Evidence shows that the program can decrease institutional admissions and improve quality of care[12,13].

Age-Friendly Health Systems (AFHS) is an initiative of The John A. Hartford Foundation and the Institute for Healthcare Improvement (IHI) in partnership with the American Hospital Association (AHA) and the Catholic Health Association of the United States (CHA). The AFHS aims to guarantee that all care with older adults follows an essential set of evidence-based practices known as the 4Ms (What Matters, Medication, Mentation, and Mobility), is harmless, and aligns with needs of older adults and their family caregivers[14,15]. What Matters: focuses on knowing and aligning care with each older adult's specific health outcome goals and care preferences, including, but not limited to, end-of-life care, and across settings of care. Medication: if medication is necessary, use Age-Friendly medication that does not interfere with What Matters to the older adult, Mobility, or Mentation across settings of care. Mentation: focuses on the prevention, identification, treatment, and management of dementia, delirium, and depression across settings of care. Mobility: focuses on ensuring that older adults move safely every day in order to maintain function and do What Matters[14,15]. Health care organizations are encouraged to join an IHI Action Community to learn from expert faculty and colleagues about implementing changes to improve care to older adults and begin their journey towards Age-Friendly Health Systems recognition. Information is available at "http://www.ihi.org/AgeFriendly".

All these models of care[8–15] are associated with better health-related outcomes regarding both quality and effectiveness of health care. This success depends on the whole structure of the programs and also on the role of GAPNs. Besides the structure and the action of interprofessional health care teams, a solid care plan is also essential to achieve parameters such as improved health and quality of life and decreased morbidity or mortality, being mostly implemented by a high-qualified nurse for gerontological advanced care practice.

COMPETENCIES OF GERONTOLOGICAL ADVANCED NURSING PRACTICE

Gerontological advanced practice nurses are significant to the primary and acute care of older adults and their practice is associated with reduced negative outcomes[2]. For a high-quality practice, an advanced practice nurse must meet diverse competencies of the role of a GAPN. Core competencies for gerontological advanced nursing practice may vary according to the source and country and model of care. The competence areas that are relevant for gerontological nursing are generally described as: 1) Competence in clinical nursing; 2) Competence in health and well-being promotion; 3) Interaction competence; and 4) Ethical competence[6]. Figure 1 presents the four relevant competencies for gerontological nursing practice.

In nursing homes and in primary care, the required competencies previously described are: "1) Living well for older adults across communities and groups; 2) Maximizing health outcomes; 3) Communicating effectively; 4) Facilitating transitions in care; 5) Facilitating choices within legal and ethical frameworks; 6) Partnering with family careers; 7) Promoting mental health and psychological well-being; 8) Providing evidence-based dementia care; 9) Providing optimal pain management; 10) Providing palliative care; and 11) Enabling access to technology"[16].

According to the American Association of Colleges of Nursing, Adult-Gerontology Acute Care and Primary Care Nurse Practitioner Competencies are categorized in nine areas: 1) Scientific foundations; 2) Leadership; 3) Quality; 4) Practice Inquiry; 5) Technology & Information Literacy; 6) Policy; 7) Health Delivery System; 8) Ethics; and 9) Independent practice. These competencies can be used to lead nursing education[17].

For a competence model to guide the practice directed to older adults independent of the care model or level of assistance complexity, we suggest six main competencies: 1) Clinical skills and caring practices; 2) Education for health literacy; 3) Collaborative care; 4) System management for continuity of care; 5) Ethics, advocacy, and moral agency; and 6) Evidenced-based practice inquiry. Together, these six competencies cover the basic principles of gerontological care.

Regarding gerontological advanced practice nursing, these six competencies can be somehow related to one another. Hierarchically, however, the main competency would probably be clinical skills for caring practices since the basis of GAPN patient care relies on a comprehensive assessment. A GAPN must be able to assess the patients, looking for relevant information that should be addressed. This relies fully on the clinical competence of the GAPN, who must identify problems that require action and follow-up while incorporating clinical judgement, reasoning, and critical thinking. As an example, when caring for older adults, common conditions such as geriatric syndromes should be identified and properly managed right away.

COMPREHENSIVE ASSESSMENT AS THE BASIS FOR GERONTOLOGICAL ADVANCED NURSING PRACTICE

Besides contributing to clinical caring practice, in-depth assessment also gives relevant information for the nurse to share with the health care team in collaborative care, highlights important aspects for patient education, substantiates the patients' needs so systems support can plan the continuity of care, and indicates whether patients and families need advocacy.

Assessment involves investigating someone's conditions and special needs to support them in decision-making and the required treatment and care[7]. Unlike general and younger adult assessment, older adult assessment uses comprehensive and multidimensional elements, focusing on complex problems and emphasizing functional status and quality of life. As multidimensional, it benefits from an interdisciplinary and integrated approach[7].

CGA is a multidimensional and interdisciplinary process that aims to identify common conditions presented by older adults and their need of care and treatment. Though CGA is usually conducted by an interdisciplinary team during integrated care[18–21], it can also be performed exclusively by a GAPN.

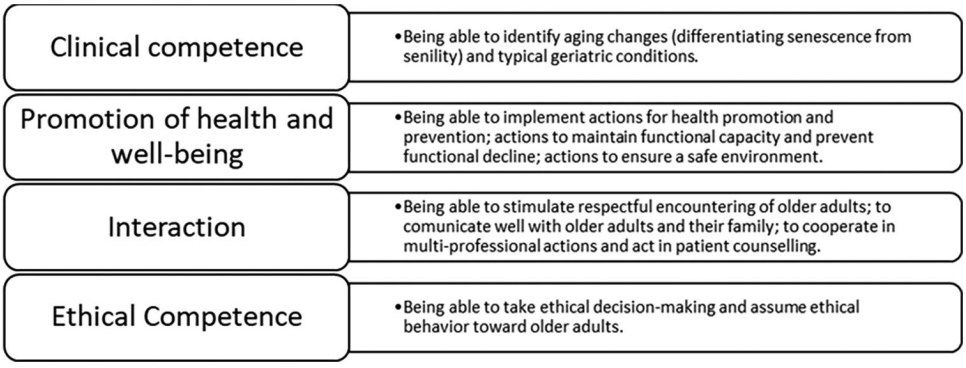

Figure 1 – Core competencies for gerontological practice (Adapted from Tohmola et al., 2021)[6] – São Paulo, SP, Brazil, 2022.

CGA benefits the GAPN's care plan by improving diagnostic accuracy, optimizing medical and rehabilitation treatment, enhancing health and functional outcomes, informing the development of individualized care plans, helping avoid potential complications of hospitalization, and facilitating effective discharge planning[18,19]. CGA is the basis for clinical practice in the continuity of care. The quality of assessment helps the GAPN's clinical reasoning and identification of nursing diagnosis. Diagnoses identified from the CGA lead GAPN's to define therapeutic goals, propose a comprehensive care plan, help patients reach their recovery and health goals, and promote good clinical outcomes.

COMPONENTS OF COMPREHENSIVE GERONTOLOGICAL ASSESSMENT

The CGA is based on three core components: 1) multidimensionality; 2) interdisciplinarity to integrate and to coordinate the multi-professional team; and 3) plan of care to coordinate several outcomes in the short and long term toward a common goal[18,19].

The CGA multidimensionality component assesses physical, functional, social psychological, and spiritual needs[18–21], allowing GAPNs to evaluate health conditions, life events, risk factors, strengths, and weaknesses of aging[21]. The assessment also analyzes physical health—including nutrition, vision, hearing, fecal and urinary continence, and balance[18–22]—, functional ability, cognition, mental health, and socioenvironmental conditions. CGA should, at least, investigate the presence of co-morbidities, polypharmacy and nutritional deficits, cognitive impairment, functional decline, fall risk, social situations that lead to vulnerability, spirituality and elements that could reduce the slope of the aging trajectory, preventing the onset of frailty and enabling a longer and better life for older adults[18–22]. Chart 1 summarizes the indicators assessed in each dimension of the CGA.

CGA also evaluates care goals and advance directive preferences[18–21]. Gerontological nursing assessment should integrate the assessment indicators with the competencies of the GAPNs for nursing practice. Though GAPN competencies might vary according to region, the principles of gerontological care must be respected. Chart 2 proposes an alignment of the domains of assessment with gerontological nursing competencies presented in Figure 2.

The gerontological nursing science has greatly advanced in designing theoretical models of care that address the various needs of older adults. However, the CGA multidimensionality feature still lacks a comprehensive cognitive assessment that supports a plan of care for early detection of cognitive changes and modifiable risk factors[23].

COMPREHENSIVE ASSESSMENT OF OLDER ADULTS FOR EARLY DETECTION OF COGNITIVE CHANGES AND MODIFIABLE RISK FACTORS

Over 131 million people will likely develop Alzheimer's Disease and Related Dementias (ADRD) by 2050 worldwide, and two-thirds of them will be in low- to middle-income countries (LMIC)[24]. Growing evidence supports that 12 modifiable risk factors—namely: lower schooling level, hypertension, hearing impairment, smoking, obesity, depression, physical inactivity, diabetes, infrequent social contact, excessive alcohol consumption, traumatic brain injury, and air pollution—account for around 40% of worldwide dementia[25]. Estimates show that 10% reductions per decade in the prevalence of modifiable risk factors could reduce the prevalence of ADRD in 2050 by 8.3%, which means preventing 11 million cases worldwide[24]. Windows of vulnerability represent opportunities to implement interventions aimed at managing modifiable risk factors at early-life (e.g., enhancing schooling levels before turning 45 years), at midlife (e.g., identifying and managing risk factors between 45–65 years), and at later-life (e.g., managing comorbidities, decreasing health costs, and improving quality of life and care throughout disease progression).

Early detection of signs and symptoms is essential in preventing and delaying dementia progression. About half of the million people expected to develop ADRD by 2050 are now aged between 45 and 64 and likely already have the AD pathology, which is advancing silently[24]. A nationwide survey detected that less than half (47%) of primary care physicians in the U.S. assess older adults for cognitive impairment during routine clinical visits[26]. Implementing a risk factor-based screening tool is essential to identify individuals at high-risk of developing ADRD—who may benefit the most from referral

Chart 1 – CGA assessment dimensions and its indicators[18–22] – São Paulo, SP, Brazil, 2022.

Dimension	Assessment Indicator
Physical	• Complaints, past medical history, clinical signs and symptoms, and nutritional status • Medication reconciliation and review • Immunization status
Functional	• Activities of daily living • Balance and Mobility
Neuropsychological	• Cognition and Mood • Substance (e.g., Alcohol) use or abuse
Spiritual	• Spirituality and religion
Social	• Living arrangements and environment • Social support and socio economic condition • Caregiver burden

Chart 2 – Focus of assessment according to the competencies for gerontological advanced nursing practice – São Paulo, SP, Brazil, 2022.

Competencies	Focus of assessment
Clinical skills for caring practices	Multidimensional assessment (physical, neuropsychological, spiritual, and social) to guide the implementation of nursing care plan
Education for healthy literacy	Assessment of healthy literacy and self-care abilities
Collaborative Care	Assessment of conditions that could use the care of a professional, such as fall risk or dysphagia
System management for the continuity of care	Assessment of the health care and social support network to foster the continuity of care
Ethics, advocacy, and moral agency	Assessment of patient advocacy, living wills, and advance directives
Evidence-based practice inquiry	Assessment of the best scientific evidence available during implementation of the care plan

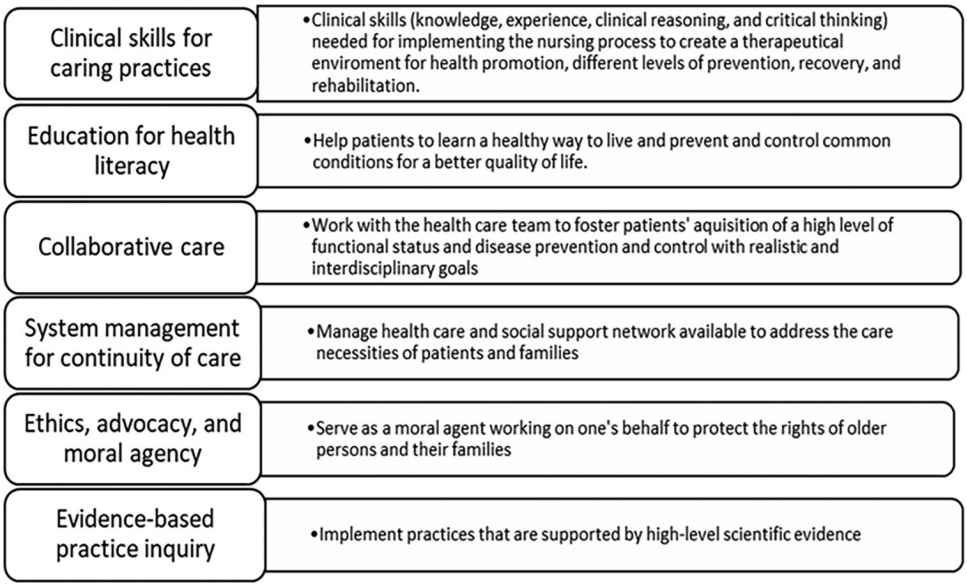

Figure 2 – Relevant competencies for gerontological advanced nursing practice – São Paulo, SP, Brazil, 2022.

to further examination (such as by neuroimaging and invasive procedures)—and preventive measures for risk factors and to support patients living with ADRD and their careers from early stages[26]. Early detection at vulnerable windows in the life course gives opportunities for advanced nurse practitioners to provide health education, care, and support to people living with ADRD and their families from the onset to advanced stages of the disease.

These findings represent the evidence-based foundation for advanced nurse practitioners to implement a comprehensive assessment target to promote brain health by managing risk factors, to detect early signs of cognitive decline, and to support patients living with ADRD and their caregivers.

Applying the GAPN model of competencies to guide the care plan, practitioners should be trained to:

1. Develop clinical skills to identify early warning signs of cognitive impairment, assess subjective memory decline, discuss cognitive concerns, and steps to obtain a diagnosis, manage comorbidities and therapeutic drug regimens;
2. Promote health literacy by educating communities, caregivers, and the health care team about the benefits of early detection and the impact of managing modifiable risk factors to reduce dementia prevalence;
3. Collaborate with the health care team to foster quality of life and care with realistic and interdisciplinary goals;
4. Know local and national support networks to address the needs of patients and families;
5. Work on behalf of patients and caregivers to protect their rights of equal and quality care from early to advanced stages of dementia; and
6. Implement evidence-based practice for high-risk screening individuals for cognitive impairment in the community and delirium in acute clinical and hospital settings[27].

If no treatments can interrupt the neurodegenerative process of ADRD, reducing everyone's risk and screening vulnerable people at the individual and community level are the main evidence-based features that support gerontological advanced nursing practices in promoting brain health and impacting aging trajectories toward a high quality of life and well-being[28].

RECOMMENDED PRACTICES FOR ASSESSMENT IN GERONTOLOGICAL ADVANCED PRACTICE

A complete CGA is comprehensive and multidimensional and should assess several aspects. The main components of the CGA are: physical assessment, psychological assessment and social, economic, environmental, and spirituality assessment[29]. For each of the CGA dimensions to be assessed, the instruments can be used according to the purpose of the assessment[30]. However, CGA assessment protocols must include the investigation of all components, even in a screening format. Besides conducting a clinical investigation on the various organ systems and a physical examination, the protocols must assess the geriatric syndromes to ensure that aspects such as cognition, mood and emotions, functional status, gait, balance and mobility, nutritional status and nutritional risks, and sensory deficits are addressed.

Several instruments are available for assessing different conditions common among older adults. When choosing the best tool, the GAPN should consider whether the tool has sufficient evidence of validity and reliability to be used in clinical practice.

Important considerations:

– CGA consists of assessing older adults globally in several domains. It should not only focus on disease states or functional capacity, as a standard or rehabilitation assessment would;

– The detailed assessment in several domains is important to obtain a comprehensive picture and to understand the impact of each domain in the life of the older adult, creating a care plan with adequate conditions to rehabilitation;

- The process is person-centered;
- Older adults who need CGA must receive it efficiently to identify their needs on time. If older adults cannot participate in their care voluntarily by performing self-care or decision-making, strategies must be safeguarded for the CGA to occur. Assessments must be performed to a credible standard by an interdisciplinary team or by the GAPN;
- CGA should be initiated on admission (including urgent care, when it is more focused); and continued throughout the continuity of care with constant review and evaluation. The record must be shared among interdisciplinary team members;
- Assessment instruments should be used to facilitate the investigation; supporting data collection (especially subjective data) allows standardizing the assessment, detecting subtle changes, and assisting in the evaluation of the results of the comprehensive care plan. This process should be supported by the use of standardized and validated assessment instruments (scales and tools).
- The GAPN must implement strategies to address barriers commonly found in CGA: performing CGA can be difficult since it is a complex assessment; a long health history is challenging since older adults can often have difficulty remembering their previous medical history; older adults can also have difficulty answering questions because of cognitive impairment; the GAPN must have skillful communication with the patient and collaborate with the family and others close to the patient to help obtain an accurate medical history if needed. Continuous communication with the family, caregivers, and other professionals of the interdisciplinary team can be beneficial.

FINAL CONSIDERATIONS

After completing competence-based education, gerontological advanced practice nurses and interprofessional teams are expected to provide evidence-based, quality, and comprehensive care for diverse necessities of older adults and their families and caregivers for quality of life and care. Gerontological models of care, based on CGA, serve as frameworks to guide nurse practitioners, who are essential to provide age-friendly care to older adults in clinical practice and expand education, research, and public policies.

RESUMEN

El envejecimiento de la población es un desafío a los sistemas de salud y requiere que los profesionales de enfermería en gerontología de práctica avanzada (EGPA) aborden los requisitos específicos y complejos del cuidado de los adultos mayores. La EGPA pone en ejecución prácticas basadas en evidencia dirigidas a pacientes y familiares para la promoción y protección de la salud, prevención de enfermedades, así como su recuperación y rehabilitación. En la gerontología de práctica avanzada basada en competencias, la evaluación integral es esencial para la puesta en práctica de un plan de cuidados. En este ensayo teórico reflexionamos sobre el papel de la evaluación en la enfermería en gerontología de práctica avanzada basada en competencias. Desde nuestro punto de vista, la valoración gerontológica hacia una práctica excelente debe ser integral, multidimensional, interdisciplinar y planificada. La EGPA debe abarcar competencias efectivas en habilidades clínicas y prácticas del cuidado; alfabetización en salud; cuidado colaborativo; gestión de sistemas para la continuidad del cuidado; ética, defensa y agencia moral; y la práctica a través de la investigación basada en la evidencia. Los modelos gerontológicos de cuidado y las competencias de la EGPA sirven como marco de su práctica, mientras que la evaluación es fundamental para un cuidado accesible a los adultos mayores.

DESCRIPTORES

Envelhecimento; Enfermagem Geriátrica; Prática Avançada de Enfermagem; Competência clínica; Modelos de Enfermagem; Avaliação em Enfermagem.

RESUMO

O envelhecimento populacional desafia os sistemas de saúde, exigindo que enfermeiros gerontológicos de prática avançada (EGPA) abordem os requisitos específicos e complexos do cuidado de idosos. EGPA implementam práticas baseadas em evidências voltadas a pacientes e familiares a fim de promover e proteger sua saúde, prevenir doenças, recuperá-los e reabilitá-los. Na prática gerontológica avançada baseada em competência, a avaliação ampla é essencial para implementar um plano de cuidado. Neste ensaio teórico, refletimos sobre o papel da avaliação na prática avançada de enfermagem gerontológica baseada em competência. Do nosso ponto de vista, a avaliação gerontológica para uma prática excelente deve ser abrangente, multidimensional, interdisciplinar e planejada. EGPA devem ter competências efetivas em habilidades clínicas e práticas de cuidado; alfabetização em saúde; cuidado colaborativo; gestão de sistemas para continuidade do cuidado; ética, defesa e agência moral; e prática por investigação baseada em evidências. Modelos gerontológicos de cuidado e das competências dos EGPA servem como uma estrutura que orienta sua prática enquanto a avaliação é fundamental ao cuidado amigo ao idoso.

DESCRITORES

Envejecimiento; Enfermería Geriátrica; Enfermería de Práctica Avanzada; Competencia Clínica; Modelos de Enfermería; Evaluación en Enfermería.

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