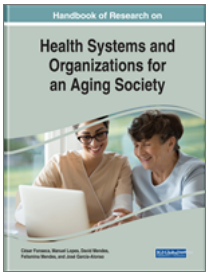

Ability Assessment of the Elders to Manage Their Own Medication: A First Step for the Empowerment of the Geriatric Population

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Abstract

About 45% of older people are unable to take their medicines as prescribed. Adherence represents a complex behavior that involves both the intention and the ability to take medication. In this way, it is importa distinguish the intention to take medicine and the ability to do so. The daily consumption of medication is a methodical process, marked by routine and that can be affected by several systematic errors associat not only due to ignorance and illiteracy, but also to its gradual loss of functional ability (physical, cognitive, and sensorial), in order to manage medication. Decreased cognitive skills, visual acuity, and manual dexterity have a significant impact on non-adherence (non-intentional), which may lead to health problems as a result of the absence or incorrect medication administration. This study presented as its main obj to assess the functional ability of community-dwelling elderly to manage their own medication, with recourse to specific tools, validated and adapted to Portugal.

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Introduction

We are old, getting older, and this has been one of the greatest civilizational achievements. More than Space, Time has undoubtedly been the supreme achievement of Man. However, society and often the individuals themselves, do not know how to deal with the years and especially with the changes that result from them. It becomes increasingly clear how important it is to fill years with life, while adding years to (Levet, 1995; Osório & Pinto, 2007).

The individual ages from birth and therefore, the age from which one considers himself old, depends on innumerable factors, not only biologically based, but also psychosocially based. In order to integrate thes multiple components, the aging person should not be analyzed by the parts that comprise it, but rather as a whole. Ultimately, the person, in this case the elderly, as a biopsychosocial being and an integral par more complex hierarchical system, should at the same time be taken into account as the most differentiated level of the organic hierarchy and the lowest unity of the social hierarchy (Adler, 2009; Margalit, Glicl Benbassat, & Cohen, 2004; Panel on New Directions in Social Demography; Social Epidemiology and the Sociology of Aging, 2013; Smith, 2002). Among the topics that received the most attention are socio-economic aspects, housing and mobility conditions, well-being and quality of life, policies and supports allocated to the elderly and health, among many other issues of interest (Panel on New Directions in Soci Demography; Social Epidemiology and the Sociology of Aging, 2013). Health, whether public or individual, depends on a set of determinants, particularly those relating to circumstances and the environment. D your life, a person is exposed to several factors that may determine his or her health, or lack thereof. Environmental, socioeconomic, housing conditions, professional occupation, social network and lifestyles a examples of conditioning factors (Dahlgren & Whitehead, 1991; Ministry of Social Affairs and Health (Finland) and European Observatory on Health Systems and Policies, 2006). As the age grow-up, the frailty tends to increase and the set of factors that the elderly has been exposed throughout its life, as well as its current context, can affect not only its health, but also its functionality (Ministry of Social Affairs and He (Finland) and European Observatory on Health Systems and Policies, 2006; World Health Organization, 2004).

The high disability rates revealed by aging, both physically and cognitively, also reflect an increased risk for health (Moraes, 2012). According World Health Organization (WHO), about 46% of individuals aged years or older had some type of disability (data on the incidence of non-fatal disease and the factor that reflects the burden of disease). The main causes observed are related to visual acuity, dementia, hearing and osteoarthritis (World Health Organization, 2008). In more developed countries, it is estimated that dementia is the main cause of years lost due to disability (World Health Organization, 2012). Associated w organic changes resulting from the natural process of senescence and the installed inability levels with the aging, chronic diseases often appear, which are characterized by a slow and long process. In older pe the predominant chronic diseases are brain and cardiovascular conditions, followed by neurodegenerative diseases, musculoskeletal diseases, several types of cancer and diabetes, which are the main cause morbidity and mortality in this age group (Ewing, 2002; Hajjar, Cafiero, & Hanlon, 2007; World Health Organization, 2005).

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References

Follow Reference Achenbaum W. A. (1995). Crossing frontiers: Gerontology emerges as a science. New York: Columbia University Press. 10.1017/CBO9780511666803

Follow Reference Adler R. H. (2009). Engel's biopsychosocial model is still relevant today.Journal of Psychosomatic Research, 67(6), 607–611. 10.1016/j.jpsychores.2009.08.00819913665

Follow Reference Alkema G. E. Alley D. E. (2006). Gerontology's future: An integrative model for disciplinary advancement.The Gerontologist, 46(5), 574–582. 10.1093/geront/46.5.5741705

Follow Reference Atalaia-Silva K. C. Lourenço R. A. (2008). Tradução, adaptação e validação de construto do Teste do Relógio aplicado entre idosos no Brasil.Revista de Saude Publica, 42(5) 937. 10.1590/S0034-89102008000500020183333391

Follow Reference Beckman A. Bernsten C. Parker M. G. Thorslund M. Fastbom J. (2005). The difficulty of opening medicine containers in old age: A population-based study.Pharmacy World Science, 27(5), 393–398. 10.1007/s11096-005-7903-z16341746

Follow Reference Beckman A. Parker M. G. Thorslund M. (2005). Can elderly people take their medicine?Patient Education and Counseling, 59(2), 186–191. 10.1016/j.pec.2004.11.00516257

Follow Reference Beers M. H. (1997). Explicit criteria for determining potentially inappropriate medication use by the elderly. An update.Archives of Internal Medicine, 157(14), 1531–1536. 10.1001/archinte.1997.00440350031003923655

Follow Reference Botelho M. A. (2000). Autonomia funcional em idosos - Caracterização multidimensional em idosos utentes de um centro de saúde urbano. Porto: Laboratório Bial.

Follow Reference Buyck D. Floyd M. Tudiver F. McGrady L. Journagin A. Kishenko S. (2005). Behavioral medicine in Russian family medicine.Patient Education and Counseling, 59(2), 205- 10.1016/j.pec.2004.11.00616026960

Follow Reference Carlson M. C. Fried L. P. Xue Q. L. Tekwe C. Brandt J. (2005). Validation of the Hopkins Medication Schedule to identify difficulties in taking medications.The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences, 60(2), 217–223. 10.1093/gerona/60.2.21715814866

Follow Reference Corsonello A. Pedone C. Lattanzio F. Lucchetti M. Garasto S. Di Muzio M. Antonelli Incalzi R. (2009). Potentially inappropriate medications and functional decline in elderl hospitalized patients.Journal of the American Geriatrics Society, 57(6), 1007–1014. 10.1111/j.1532-5415.2009.02266.x19467144

Follow Reference Cotrell V. Wild K. Bader T. (2006). Medication management and adherence among cognitively impaired older adults.Journal of Gerontological Social Work, 47(3–4), 31–46. 10.1300/J083v47n03_0317062521

Dahlgren, G., & Whitehead, M. (1991). Policies and strategies to promote social equity in health. Stockholm: Academic Press.

Follow Reference de Beauvoir S. (1970). La vieillesse. Gallimard.

Follow Reference Delgado A. B. Lima M. L. (2001). Contributo para a validação concorrente de uma medida de adesão aos tratamentos.Psicologia, Saúde & Doenças, 2(2), 81–100.

Follow Reference Easton K. L. (1993). Defining the concept of self-care.Rehabilitation Nursing: The Official Journal of the Association of Rehabilitation Nurses, 18(6), 384–387. 10.1002/j.20 7940.1993.tb00794.x7938895

Follow Reference Edelberg H. K. Shallenberger E. Hausdorff J. M. Wei J. Y. (2000). One-year follow-up of medication management capacity in highly functioning older adults.The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences, 55(10), M550–M553. 10.1093/gerona/55.10.M55011034226

Follow Reference Edelberg H. K. Shallenberger E. Wei J. Y. (1999). Medication management capacity in highly functioning community-living older adults: Detection of early deficits.Journal c American Geriatrics Society, 47(5), 592–596. 10.1111/j.1532-5415.1999.tb02574.x10323653

Follow Reference Elliott R. A. Marriott J. L. (2009). Standardised assessment of patients' capacity to manage medications: A systematic review of published instruments.BMC Geriatrics, 9(1), 10.1186/1471-2318-9-2719594913

Follow Reference Ewing A. B. (2002). Altered drug response in the elderly. In CairnsC.ArmourD. (Eds.), Medicines in the elderly (pp. 15–27). London: Pharmaceutical Press.

Follow Reference Farris K. B. Kelly M. W. Tryon J. (2003). Clock drawing test and medication complexity index as indicators of medication management capacity: A pilot study.Journal of the American Pharmaceutical Association, 43(1), 78–81. doi:10.1331/10865800360467097

Follow Reference Farris K. B. Phillips B. B. (2008). Instruments assessing capacity to manage medications.The Annals of Pharmacotherapy, 42(7), 1026–1036. 10.1345/aph.1G50218594054

Follow Reference Fernández-Ballesteros R. (2000). Gerontología social. Madrid: Pirámide.

Follow Reference Ferreira P. L. Rodrigues R. Nogueira D. (2006). Avaliação multidimensional em idosos. Coimbra: Mar da Palavra.

Follow Reference Folstein M. F. Folstein S. E. McHugh P. R. (1975). "Mini-mental state". A practical method for grading the cognitive state of patients for the clinician.Journal of Psychiatric Research, 12(3), 189–198. 10.1016/0022-3956(75)90026-61202204

Follow Reference Fonseca A. M. (2005). O envelhecimento bem-sucedido. In PaúlC.A. M. Fonseca (Eds.), Envelhecer em Portugal (pp. 281–311). Lisboa: Climepsi Editores.

Follow Reference Freedman M. Leach L. Kaplan E. Winocur G. Shulman K. I. Delis D. C. (1994). Clock drawing: A neuropsychological analysis. New York: Oxford University Press.

Follow Reference George J. Phun Y. T. Bailey M. J. Kong D. C. M. Stewart K. (2004). Development and validation of the medication regimen complexity index.The Annals of Pharmacotherap 38(9), 1369–1376. 10.1345/aph.1D47915266038

Follow Reference Gray S. L. Mahoney J. E. Blough D. K. (2001). Medication adherence in elderly patients receiving home health services following hospital discharge.The Annals of Pharmacotherapy, 35(5), 539–545. 10.1345/aph.1029511346058

Follow Reference Hajjar E. R. Cafiero A. C. Hanlon J. T. (2007). Polypharmacy in elderly patients.The American Journal of Geriatric Pharmacotherapy, 5(4), 345–351. 10.1016/j.amjopharm.2007.12.00218179993

Follow Reference Hutchison L. C. Jones S. K. West D. S. Wei J. Y. (2006). Assessment of medication management by community-living elderly persons with two standardized assessment tools cross-sectional study.The American Journal of Geriatric Pharmacotherapy, 4(2), 144–153. 10.1016/j.amjopharm.2006.06.00916860261

Follow Reference Irvine-Meek J. Gould O. N. Wheaton H. Todd L. E. (2010). Acceptability and face validity of a geriatric self-medication assessment tool.The Canadian Journal of Hospital Pharmacy, 63(3), 225–232. 10.4212/cjhp.v63i3.91822478982

Follow Reference Irvine-Meek J. M. Gould O. N. (2011). Psychometric evaluation of a self-medication assessment tool in an elderly population.The Canadian Journal of Hospital Pharmacy, 64 16–24. 10.4212/cjhp.v64i1.98222479024

Follow Reference Kostanjsek N. (2011). Use of The International Classification of Functioning, Disability and Health (ICF) as a conceptual framework and common language for disability stat and health information systems.BMC Public Health, 11(Suppl 4), S3. 10.1186/1471-2458-11-S4-S321624189

Follow Reference Kripalani S. Henderson L. E. Chiu E. Y. Robertson R. Kolm P. Jacobson T. A. (2006). Predictors of medication self-management skill in a low-literacy population.Journal of General Internal Medicine, 21(8), 852–856. 10.1111/j.1525-1497.2006.00536.x16881946

Follow Reference Lakey S. L. Gray S. L. Borson S. (2009). Assessment of older adults' knowledge of and preferences for medication management tools and support systems.The Annals of Pharmacotherapy, 43(6), 1011–1019. 10.1345/aph.1L70419470855

Follow Reference Lam L. C. Chiu H. F. Ng K. O. Chan C. Chan W. F. Li S. W. Wong M. (1998). Clock-face drawing, reading and setting tests in the screening of dementia in Chinese elderly adults.The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences, 53(6), 353–357. 10.1093/geronb/53B.6.P3539826966

Follow Reference Lawton M. P. Brody E. M. (1969). Assessment of older people: Self-maintaining and instrumental activities of daily living.The Gerontologist, 9(3), 179–186. 10.1093/geront/9.3_Part_1.1795349366

Follow Reference Levet M. (1995). Vivre aprés 60 ans. Lisboa: Instituto Piaget.

Follow Reference Linnebur S. A. (2010). Geriatric assessment. In HutchisonL. C.SleeperR. B. (Eds.), Fundamentals of geriatric pharmacotherapy: An evidence-based approach (pp. 71–90). Bethesda, Maryland: American Society of Health-Systems Pharmacists.

Follow Reference MacLaughlin E. J. Raehl C. L. Treadway A. K. Sterling T. L. Zoller D. P. Bond C. A. (2005). Assessing medication adherence in the elderly - Which tools to use in clinical practice?Drugs & Aging, 22(3), 231–255. 10.2165/00002512-200522030-0000515813656

Follow Reference Maddigan S. L. Farris K. B. Keating N. Wiens C. A. Johnson J. A. (2003). Predictors of older adults' capacity for medication management in a self-medication program: A retrospective chart review.Journal of Aging and Health, 15(2), 332–352. 10.1177/0898264303025189312795276

Follow Reference Madureira S. Verdelho A. (2007). Escala de actividades instrumentais da vida diária (IADL). In MendonçaA.GuerreiroM. (Eds.), Escalas e testes na demência (2nd ed.; pp. 1 115). Grupo de Estudos de Envelhecimento Cerebral e Demência.

Follow Reference Margalit A. P. A. Glick S. M. Benbassat J. Cohen A. (2004). Effect of a biopsychosocial approach on patient satisfaction and patterns of care.Journal of General Internal Med 19(5), 485–491. 10.1111/j.1525-1497.2004.30059.x15109309

Follow Reference Martin D. J. Gillen L. L. (2014). Revisiting gerontology's scrapbook: From Metchnikoff to the spectrum model of aging.The Gerontologist, 54(1), 51–58. 10.1093/geront/gnt07323893558

Follow Reference Melchiors A. C. Correr C. J. Fernández-Llimos F. (2007). Translation and validation into Portuguese language of the medication regimen complexity index.Arquivos Brasilei Cardiologia, 89(4), 210–218. 10.1590/S0066-782X20070016000011799237 6

Follow Reference Meyer M. E. Schuna A. A. (1989). Assessment of geriatric patients' functional ability to take medication.Drug Intelligence & Clinical Pharmacy, 23(2), 171–174.2728508

Ministry of Social Affairs and Health (Finland) and European Observatory on Health Systems and Policies. (2006). Health in all policies: Prospects and potentials. Helsinki: Author.

Moraes, E. N. (2012). Atenção à saúde do idoso: Aspetos conceituais. Brasília: Academic Press.

Follow Reference Morisky D. E. Green L. W. Levine D. M. (1986). Concurrent and predictive validity of a self-reported measure of medication adherence.Medical Care, 24(1), 67–74. 10.1097/00005650-198601000-000073945130

Follow Reference Muir A. J. Sanders L. L. Wilkinson W. E. Schmader K. (2001). Reducing medication regimen complexity.Journal of General Internal Medicine, 16(2), 77–82. 10.1046/j.1525 1497.2001.016002077.x11251757

Nolte, E., & Knai, C. (2014). Introduction. In E. Nolte, C. Knai, & S. R. B. (Eds.), *Assessing chronic disease management in European health systems: Concepts and approac* (pp. 1–7). Copenhagen: World Health Organization, European Observatory on Health Systems and Policies, European Commission.

Follow Reference Orem D. E. Taylor S. G. Renpenning K. M. (2001). Nursing: Concepts of practice (6th ed.). St. Louis: Mosby.

Follow Reference Orwig D. Brandt N. Gruber-Baldini A. L. (2006). Medication management assessment for older adults in the community.The Gerontologist, 46(5), 661–668. 10.1093/geront/46.5.66117050757

Follow Reference Osório A. R. Pinto F. C. (2007). Las personas mayores. Lisboa: Instituto Piaget.

Panel on New Directions in Social Demography, Social Epidemiology and the Sociology of Aging. (2013). *New directions in the sociology of aging* (L. J. Waite & T. J. Plewe Eds.). Washington, DC: National Academy of Sciences.

Follow Reference Park D. C. Bischof G. N. (2013). The aging mind: Neuroplasticity in response to cognitive training.Dialogues in Clinical Neuroscience, 15(1), 109–119.23576894

Follow Reference Raehl C. L. Bond C. A. Woods T. Patry R. A. Sleeper R. B. (2002). Individualized drug use assessment in the elderly.Pharmacotherapy, 22(10), 1239–1248. 10.1592/phco.22.15.1239.3347312389875

Follow Reference Renpenning K. Taylor S. (2003). Self-care theory in nursing: Selected papers of Dorothea Orem. New York: Springer Publishing Company.

Follow Reference Robnett R. H. Dionne C. Jacques R. LaChance A. Mailhot M. (2007). The ManageMed Screening: An interdisciplinary tool for quickly assessing medication management skills.Clinical Gerontologist, 30(4), 1–23. 10.1300/J018v30n04_01

Follow Reference Ruscin J. M. Semla T. P. (1996). Assessment of medication management skills in older outpatients.The Annals of Pharmacotherapy, 30(10), 1083–1088. 10.1177/10600280960300100388931 12

Follow Reference Schmidt K. S. Lieto J. M. (2005). Validity of the Medication Administration Test among older adults with and without dementia.The American Journal of Geriatric Pharmacotherapy, 3(4), 255–261. 10.1016/j.amjopharm.2005.12.00316503321

Follow Reference Schrijvers G. Van Hoorn A. Huiskes N. (2012). The care pathway: Concepts and theories: An introduction.International Journal of Integrated Care, 12(6), 1–7. 10.5334/ijic.81223593066

Follow Reference Smith R. C. (2002). The biopsychosocial revolution.Journal of General Internal Medicine, 17(4), 309–310. 10.1046/j.1525-1497.2002.20210.x

Follow Reference Smith-Stoner M. Beaman M. L. (2010). Interdisciplinary research: Medication management by community elders.Communicating Nursing Research, 43, 497. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=2010750575&site=ehost-live&scope=site (http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=2010750575&site=ehost-live&scope=site)

Follow Reference Tordoff J. Simonsen K. Thomson W. M. Norris P. T. (2010). "It's just routine." A qualitative study of medicine-taking amongst older people in New Zealand.Pharmacy World Science, 32(2), 154–161. 10.1007/s11096-009-9361-520043241

Follow Reference Tuokko H. Hadjistavropoulos T. Miller J. A. Beattie B. L. (1992). The Clock Test: A sensitive measure to differentiate normal elderly from those with Alzheimer disease.Jour the American Geriatrics Society, 40(6), 579–584. 10.1111/j.1532-5415.1992.tb02106.x1587974

Follow Reference Vanhaecht K. De Witte K. Sermeus W. (2007). The impact of clinical pathways on the organisation of care processes. Belgium: KU Leuven.

Follow Reference Wilkinson A. Whitehead L. (2009). Evolution of the concept of self-care and implications for nurses: A literature review.International Journal of Nursing Studies, 46(8), 1143 1147. 10.1016/j.ijnurstu.2008.12.01119200992

Follow Reference Windham B. G. Griswold M. E. Fried L. P. Rubin G. S. Xue Q.-L. Carlson M. C. (2005). Impaired vision and the ability to take medications.Journal of the American Geriatri Society, 53(7), 1179–1190. 10.1111/j.1532-5415.2005.53376.x16108936

Follow Reference World Health Organization . (2002). Active ageing: A policy framework. Madrid: WHO.

Follow Reference World Health Organization . (2004). Ageing and health technical report. Kobe, Japan: WHO.

World Health Organization & Direção-Geral da Saúde. (2004). *Classificação Internacional de Funcionalidade, Incapacidade e Saúde (CIF)*. Lisboa: WHO.

World Health Organization. (2005). *Healthy ageing - Practical pointers on keeping well*. Manila, Philippines: WHO.

World Health Organization. (2008). *The global burden of disease - 2004 Update*. Geneva: WHO.

World Health Organization. (2012). *Good health adds life to years - Global brief for World Health Day 2012*. Geneva: WHO.