

Impact of Health Literacy on Medication Use in Older Adults: A Literature Review

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Introduction

According to the CDC, 48.6% of the U.S. population used at least one prescription drug in the past 30 days. (1) Medication use is especially common in older adults. There is evidence that low health literacy may independently be associated with an increased risk of adverse health outcomes. (2)

Purpose

To explore the relationship between deficits in health literacy and medication-related problems including adverse drug events and nonadherence in older adults and to identify tools on assessing medication literacy

Methodology

- A literature search of PubMed from inception until April 2024 was conducted of the terms "medication literacy" AND medication use AND older adults Filters: Humans, English, Aged: 65+ years, Yield 20 articles. Sent to Clipboard.
- A 2nd PubMed search with the same date and filters was performed using ("Patient Medication Knowledge"[Mesh]) AND ("Aged"[Mesh] OR "Frail Elderly"[Mesh]). Yield 67 articles. Sent to Clipboard.
- **Result:** 87-1 duplicate- 1 retraction = 85 articles

Results

- This is a descriptive report of findings and themes identified from the literature review.
- 27 countries/combinations of countries were the source of these papers with the U.S. having the most citations at 23 and China the second most at 7.
- Common themes that emerged:
 - Factors associated with poor medication literacy are older age, lower education level, frailty, multimorbidity, lower income, and perceived poor health status
 - Need to improve communication and reinforce verbal instructions with written instructions for patient education
 - Educational materials should be culturally- and age-appropriate (e.g. HIV in older adults, diabetes education in older Chinese-Americans)
 - Visual identification of medications is associated with worse medication adherence
 - Deficit areas of medication knowledge are many but one of the most problematic areas across countries was proper self-administration of injectable medications
 - Medication knowledge is power and contributes to informed decision-making, including about deprescribing
 - Social support improves adherence
- The search was limited to 65+, but mixed aged populations and even a pediatric article appeared in the search.

Conclusion

Although this study included papers from around the world, common themes existed in terms of risk factors for poor medication literacy and the need to improve patient education and communication. Limitations included that several articles were population-specific and/or included mixed ages.

Resources

- AHQR- Health Literacy Tools for Providers of Medication Therapy Management <https://www.ahrq.gov/health-literacy/improve/pharmacy/medication-mgt.html>
- Gentizon J et al. Conceptualization and content validation of the MEDication literacy assessment of geriatric patients and informal caregivers (MED-fLAG). J Patient Rep Outcomes. 2022 Aug 19;6(1):87. doi: 10.1186/s41687-022-00495-2. PMID: 35984575
- USP Pictograms: <https://www.usp.org/health-quality-safety/usp-pictograms>

References

- (1) CDC. Therapeutic Drug Use, <https://www.cdc.gov/nchs/fastats/drug-use-therapeutic.htm>
- (2) Healthy People 2030- Health Literacy <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/health-literacy>