

Bridging health literacy gaps in health profession education: preparing students to provide holistic care

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Health literacy plays a crucial role in achieving optimal health. Individuals with strong health literacy level are better able to manage their health, seeking accurate information, understanding clinical explanations, and putting recommendations into practice, so their decisions are more informed and meaningful. Although the topic has been discussed for years, the term “health literacy” is still often misunderstood, including among health professionals, particularly in developing countries such as Indonesia.

Historically, health literacy referred mainly to basic reading and comprehension of simple information related to health. As health systems and societal needs have evolved, the concept has expanded; it now encompasses not only reading but also understanding and using health information and services in everyday life. Contemporary definitions distinguish between personal health literacy and organizational health literacy (Santana et al., 2021). The current definition of health literacy is “*the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others*”(Office of Disease Prevention and Health Promotion (ODPHP), 2025)

Individuals with low health literacy often struggle to manage their health. Even those with higher education may find it hard to navigate complex healthcare systems. Poor health literacy is associated with higher healthcare use and worse outcomes, reinforcing the need for health-literacy interventions worldwide (Li et al., 2022; Tefera et al., 2020; Veerasetty et al., 2024; Wu et al., 2013). Healthcare providers play a key role in helping communities build health literacy. Doctors, nurses, and other allied health professionals have a duty to provide clear health information, ensure patients understand it, and support them in making decisions based on that information. However, as noted earlier, health literacy is not well understood by many healthcare professionals. Studies involving doctors, nurses, and allied health staff

show limited understanding; in fact, many have never heard the term (Macabasco-O'Connell & Fry-Bowers, 2011; Rajah et al., 2017, 2018; Sriyanah et al., 2021). As a result, they often rely on traditional teaching methods and may not accurately assess whether patients have understood, leaving them less able to educate patients with low health literacy. This is unsurprising, as most received little or no training on health literacy during their education.

Improving education on health literacy is essential to prepare competent professionals who can help people strengthen their health literacy and mitigate the harms linked to limited literacy. Significant gaps between education and practice persist across nursing, medicine, pharmacy, and allied health. Several U.S. studies show that health-professions programs should equip students with health-literacy knowledge and practical experience so they can support patients with low health literacy (Coleman, 2011; Røe et al., 2025; Toronto & Weatherford, 2015; Tsai et al., 2024). Such preparation helps students manage patients effectively, choose approaches that build understanding, and support sound decision-making.

Health-professions students can also use peer-support approaches to help patients understand and accept their condition and to strengthen patients' decision-making skills. For example, with complex conditions such as HIV or mental-health problems, younger patients may be reluctant to engage with clinicians. Peer support can be an effective way to reach these patients and improve quality of life (Usman & Kadar, 2021). Without training in health literacy, students may not recognize peer support as a key intervention. With a solid grasp of health literacy, students can communicate more effectively, appreciate the psychosocial benefits of peer support, and advocate for these programs in the community. Strong health-literacy knowledge also supports effective communication across age groups and helps students

address patients' spiritual and cultural needs (Ilmi et al., 2024).

Given the points above, it is clear that knowledge of health literacy is essential for healthcare professionals. This preparation should begin as early as their pre-service training. Embedding health-literacy modules or courses in medical, nursing, and allied health programs, covering effective communication, cultural competence, psychosocial support, and spiritual care is crucial to prepare students to become capable practitioners. Teaching students how to deliver effective health education tailored to patients' educational level, cultural background, and beliefs will help them communicate more effectively with patients who have limited health literacy, thus it will encourage the patients to be proactive in managing their disease and give them confidence to take charge of their health (Finbråten et al., 2020).

Returning to the updated definition of health literacy, organizations also need to accommodate and implement health-literacy-informed interventions. Hospitals and public health centers should recognize the importance of health literacy, and training institutions should treat it as a core competency. Evidence shows that many health professionals have a limited understanding of health literacy; although studies in countries like Indonesia remain few, research from Indonesia and Malaysia indicates that many clinicians have never heard of the term or misunderstand it. Health literacy is an individual capability: it can be strengthened, but it cannot simply be "given" through a one-off education session. To achieve the best results, health education must account for a patient's health-literacy level.

It is time for Indonesian health institutions to include this topic as a dedicated course, not merely a subtopic within another course. To date, none of the nursing institutions in Indonesia have included health literacy as a standalone course; where it appears, it is often only a subtopic within courses such as Health Promotion or Community Health Nursing. Indonesian higher-education institutions should prioritize health-literacy training to prepare future practitioners for the complex, human-centered realities of healthcare.

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