

models, strictly adhering to the medication operation procedures formulated by the department, and providing detailed medication guidance to patients (Figure 1) (Aly et al., 2023; Öztürk et al., 2024).

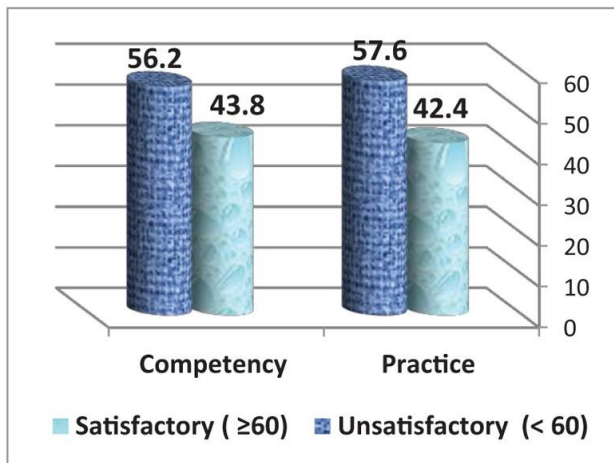


Figure 1 Percentage of nurses' practice and competency during administration of HAMs (Adopted from Aly et al., 2023)

For the elderly patient group after discharge, nursing staff can adopt a comprehensive intervention plan combining follow-up tracking, medication verification, and health education. Such intervention methods not only help reduce the probability of missed doses, repeated medication, etc., but also reduce the risk of drug interactions that may occur under complex combined medication regimens (Zhu et al., 2024). Focusing the work focus of medication verification on high-risk drugs and vulnerable populations can help medical service personnel more reasonably allocate limited medical resources and prioritize the prevention of higher-risk medication safety risks.

4 The Internal Logic and Clinical Significance of Drug Education

4.1 The logical mechanism of drug education in improving treatment outcomes

Health education on medication plays a crucial role in enhancing the clinical treatment outcomes. The core of such intervention methods is to assist patients in mastering the standardized medication methods and adjusting their daily behavioral habits to match their health needs. Clinical practice has confirmed that scientific and standardized medication guidance can significantly improve patients' compliance with medical instructions, thereby helping them more effectively manage the progression of their diseases. Clearly explaining to patients the pathogenesis of the disease, the core points of treatment, the frequency of medication use, possible adverse reactions, and the necessity of following medical advice for medication can enhance their health awareness, improve their self-health management ability, and ultimately improve the clinical treatment effects of chronic diseases such as diabetes, hypertension, and heart failure (Mustara et al., 2025; Singh et al., 2025).

Relevant data from randomized controlled trials and systematic reviews further verify that compared to traditional conventional management models, standardized medication guidance programs or targeted health education intervention measures demonstrate significant advantages in improving patients' medication compliance, optimizing blood sugar, blood pressure, and lipid control levels, and enhancing clinical treatment outcomes (Figure 2) (Mustara et al., 2025; Singh et al., 2025).

High-quality medication health education often requires customized planning based on the individual needs of patients, and is based on two-way communication between doctors and patients throughout the process. The core of this educational model is not one-way information dissemination, but a comprehensive service process that includes medication knowledge, questions about medication use, and behavioral intervention (Mustara et al., 2025). Multiple clinical practice studies have also pointed out that by distributing medication reminder cards, popularizing health education manuals, using intelligent reminder tools, and conducting multiple face-to-face communications or home visits to solve actual medication problems, it can help patients maintain good medication habits and self-health management abilities over the long term (Singh et al., 2025).