

efficacy of the medication and adverse reactions, which also exposes the current shortcomings in medication education.

Some review studies on adverse reaction reporting and monitoring have indicated that both healthcare professionals and the patient population generally have a low level of awareness regarding drug adverse reactions, and the reporting rate of related adverse events is also at a relatively low level. This research conclusion suggests that systematic drug safety education efforts are highly necessary, and the educational content should cover the specific manifestations of common adverse reactions, the classification of high-risk drugs, and basic emergency handling principles.

5.3 Personalized medication guidance tailored to patients' individual characteristics

To ensure that health education on medication use achieves the desired results, it is necessary to tailor the guidance plan based on the patient's physical condition, cognitive ability, health literacy level, language habits, and personal preferences. From a clinical practice perspective, such personalized health guidance and intervention methods are the core components of personalized nursing services. They not only can significantly enhance patients' satisfaction with medical treatment but also can alleviate their negative psychological states during the diagnosis and treatment process (Jandaghian-Bidgoli et al., 2025). A collaborative study on elderly patients with multiple comorbidities found that if nurses actively conducted regular follow-ups, dynamically adjusted the care plan according to the patient's condition, and provided professional consultations, they could precisely identify the drug adverse reactions, potential medication risks, and complex issues in the treatment plan, making subsequent treatment arrangements more scientific and more in line with the patient's actual needs.

Nursing staff will flexibly adjust the communication methods according to the actual needs of different patients. For instance, they will prepare translation aids and written guidance manuals in advance, and explain in simple and understandable language, fully adapting to the language habits and cultural background of the patients. The specific measures of personalized guidance include: coordinating the medication time with the patient's daily routine rhythm, breaking down the complex combined medication plans into more clear and understandable parts, and organizing the patient and their family members to jointly review "Medication List" and other contents. The core goal of this type of guidance approach is to enhance the level of medication safety and at the same time motivate patients to actively participate in the treatment process (Jandaghian-Bidgoli et al., 2025). By integrating professional drug knowledge with the individual assessment results of patients, nursing staff can transform standardized treatment guidelines into precise suggestions that meet the actual needs of patients, helping patients develop safe, standardized and long-term adherent medication habits, and thereby establishing a personalized medication management system centered on patients.

6 The Role of Nursing Staff in Medication Adherence Management

6.1 Assessment of medication adherence and its influencing factors

Patients' ability to adhere to prescribed medication regimens is influenced by multiple factors, including disease characteristics, psychological status, social support, and clinical treatment conditions. Therefore, systematic assessment of medication adherence is a core responsibility of nursing staff. Nursing practice indicates that nurses should regularly verify patients' actual medication use, analyze reasons for missed doses or self-discontinuation, and identify common barriers such as concerns about adverse drug reactions, insufficient health literacy, complex treatment regimens, and lack of family support (Liang et al., 2025). In community and home-care settings, nurses can identify non-adherent behaviors by comparing prescriptions with actual medication-taking practices and conducting targeted inquiries. Commonly used assessment tools include the Morisky Scale and medication adherence checklists (Oliveira et al., 2024).

Studies have shown that financial burden, limited access to healthcare services, misconceptions regarding combination therapy, and excessive concerns about medication safety can all reduce medication adherence (Sipasulta and Andraini, 2025). In addition, patients' medication self-efficacy plays a key mediating role between perceived barriers and actual medication-taking behavior. Therefore, nurses should consider not only objective constraints but also patients' subjective confidence in managing their medications during the assessment process (Liang et al., 2025).