Medication Adherence
Still Looking for the Answer

Research on interventions designed to improve adherence to medications for chronic illness has grown substantially over the past 10 years; however, relatively little of this research has been devoted to older adult populations. This lack of research is surprising, given that older adults bear the bulk of the chronic illness burden in our society and take a greater average number of prescription medications than younger individuals (National Center for Health Statistics, 2009). The ongoing growth in the older adult population necessitates greater attention to supporting adherence and persistence to medication, as it is the most common approach to managing chronic illness in older adults.

Within gerontological medication adherence research currently published in the literature, the degree of improvement resulting from interventions on medication adherence is typically not very large (Conn et al., 2009). It is also difficult to compare interventions and their outcomes across studies due to wide variation in study design, measurement methods, and outcome reporting. Future investigation into gerontological medication adherence needs to include careful attention to three areas that can improve adherence research: holistic approach, measurement, and theory.

**HOLISTIC APPROACH**

Much of the prior medication adherence research has attempted to explain the variation in medication adherence by analyzing cognitive factors of the patient, such as medication knowledge, beliefs, self-efficacy, and intention to adhere. These are important factors but lead to interventions that are heavy on medication education. These education-focused interventions simply are not very effective at actually inducing adherence behavior change (Conn et al., 2009; Ruppar, Conn, & Russell, 2008).

Future work must give at least equal attention to the patient’s environment, daily habits and routines, financial barriers, medication management skills, and regimen complexity (Ruppar et al., 2008). Researchers should also take an ecological perspective, looking at factors outside of the patient level (McLeroy, Bibeau, Steckler, & Glanz, 1988). Most clinicians can acknowledge that medication adherence is influenced by factors at the health care provider, family, community, health care system, and health policy levels, but little research has fully explored the influence of these factors (Kaissi & Parchman, 2009; Maddox & Ho, 2009).

**MEASUREMENT**

Medication adherence research has always been plagued by issues of measurement. Operational definitions and adherence measurement techniques vary widely. Self-report measures are common but are prone to subjectivity; they have poorer correlation with other measures of medication adherence and often do not reflect the patient’s actual medication-taking behavior (Hansen et al., 2009; Osterberg & Blaschke, 2005). Medication refill data are objective but really only measure the persistence component of adherence—whether a person continues to take a prescribed medication—and miss the execution facet, which is how accurately the patient follows the prescribed dosing schedule. To date, electronic monitoring is the only objective method (aside from direct observation) that can assess dosing times and allow for analysis of adherence patterns.

**THEORY**

A theoretical gap exists between the descriptive and intervention medication adherence research. Several theoretical models have been used to describe the predictors and moderators of medication adherence, but most interventions tested are not theory driven. Additional research is needed to develop and test theory-driven interventions so that behavioral scientists can explain not only which interventions work, but how they work.
The theories and interventions also need to incorporate an ecological approach, acknowledging that medication adherence is explained by more than just patient-related factors. The influence of other significant people in the patient’s life and the influence of the health care system and health policy should be included to achieve a full conceptual model of medication adherence behavior.

CONCLUSION
Medication adherence is a vital health behavior for the management of most chronic conditions in older adults. Nurses have long been seen as playing an important role in improving medication adherence and can now serve an important role in improving the research in this area.

REFERENCES


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