

Factors Predicting Self-reported Medication Low Adherence in a Large Sample of Adults in the U.S. General Population: A Cross-sectional Study

The following is a synopsis of “Factors Predicting Self-reported Medication Low Adherence in a Large Sample of Adults in the U.S. General Population: A Cross-sectional Study” published in June 2017 in *BMJ Open*.



What is already known on this topic?

Medication nonadherence is one of today's most important and costly public health problems. Adherence is defined as the extent to which an individual's behavior, including taking medications, corresponds to recommendations from a health care provider. Reasons for nonadherence may include the cost of medications and patients' lack of education about their prescriptions. Poor adherence is associated with poor health outcomes and high health care costs. Studies suggest that 20% to 30% of patients do not ever fill their prescriptions, and about 50% of patients do not continue their treatment as prescribed. In the United States, an estimated \$100 billion to \$290 billion could be saved by improving adult adherence to treatment for chronic conditions. There is limited information on the prevalence and correlates of nonadherence, and estimates vary based on the definition of adherence and the data sources used.

What is added by this article?

The authors used a patient-centric approach, comparing self-reported medication behaviors and socioeconomic factors to understand predictors of low medication adherence. The study consisted of a 30-minute cross-sectional online survey of 9,202 respondents from across the United States. Respondents self-reported demographic characteristics, health status, barriers to access, health care

utilization, and medication adherence. Associations between medication adherence and the other patient characteristics were examined.

The authors used the eight-item Morisky Medication Adherence Scale (MMAS-8) to assess self-reported adherence. Low adherence is defined as a score less than 6, medium adherence as scores 6 or 7, and high adherence as a score of 8. Based off this scale, the authors found that 42% of respondents had low adherence, 29.4% had medium adherence, and 28.6% had high adherence. Because individuals tend to self-report higher rates of adherence, nonadherence estimates are likely to be underestimated.

High adherence rates were associated with having a frequent, continuous relationship with a primary care provider. Low adherence was most strongly associated with younger age (18–25 years), possibly because younger individuals tend to be healthier and may not have a continuous relationship with a provider. Hispanic or African-American ancestry was also associated with low adherence, even after the data were adjusted for income and health care utilization. Other significant predictors of low adherence included frequent use of the emergency department, the use of more than two providers, and difficulty covering the costs of health care, medication, or transportation.

What are the implications of these findings?

This study found that low medical adherence was commonly reported across the United States. Low adherence is significantly more prevalent among ethnic minorities, those who experience barriers to health care access, and those who use multiple providers. Interventions and policy initiatives should focus on improving patient education and counseling to educate patients and foster continuous relationships with primary care providers and pharmacists. Because many patients tend to use emergency departments and urgent care centers, development of a centralized electronic medical records system could allow providers to access a centralized information source, improving quality and delivery of care. This study examines factors associated with medication adherence in the United States and may not be applicable to other countries. Additionally, the study did not examine adherence rates by specific diseases or disorders.

Resources

Centers for Disease Control and Prevention
Overcoming Barriers to Medication Adherence for Chronic Diseases
<https://www.cdc.gov/cdcgrandrounds/archives/2017/February2017.htm>

Million Hearts®
Medication Adherence
<https://millionhearts.hhs.gov/tools-protocols/medication-adherence.html>

World Health Organization
Adherence to Long-term Therapies: Evidence for Action
http://www.who.int/chp/knowledge/publications/adherence_report/en/

Citation

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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