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**Title**

*Cost-Related Medication Non-Adherence and Cardiovascular Risk Factors in the US, 2019-2021*

**Priority 1 (Research Category)**

Patient Education/Adherence

**Presenters**

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**Abstract**

Introduction

In the US, cardiovascular diseases (CVD) are the leading cause of death and disability. Cost-related non-adherence (CRMN) is common and can have serious consequences and worsen cardiovascular disease management outcomes. We examined the relationship between CVD risk factors and CRMN among adults in the United States.

Methods

Data from the 2019-2021 National Health Interview Survey (NHIS) was used to examine CRMN among adults 18 and older. Participants were categorized into three groups based on reported risk factors. We used chi-square tests and logistic regression to determine factors associated with CRMN after adjusting for socioeconomic characteristics.

Results

The data included 49,464 participants with a weighted sample size of 143,685,241. We found that young respondents, unmarried individuals, females, those with less education, and participants in the South had a higher rates proportion of CRMN compared to older, married individuals, males, and those with higher education and residing in the other regions. Current smokers and those with more CVD risk factors also had a higher proportion of non-adherence than former smokers and those who never

smoked. Conversely, those aged 65 or older, in high-income families, and with excellent self-rated health had a lower proportion of non-adherence compared to those who were younger participants, low-income families, and those who rated their health as poor. Patients with other public insurance and Medicaid were less likely to be non-adherent than uninsured (OR 0.14, 95% CI, 0.04-0.52, and OR 0.22, 95% CI, 0.14-0.34). Stratified regression analysis based on the disease status, i.e., diabetes, hypertension, and hyperlipidemia, revealed that participants from high-income families with hypertension, diabetes, and hyperlipidemia had lower odds of non-adherence (OR 0.38, 95% CI 0.28-0.52, OR 0.42, 95% CI, 0.27-0.64 respectively) than those with lower incomes.

## Conclusion

We found that American adults under 65 and those with more CVD risk factors are at risk of CRMN. The findings suggest the need for robust prescription drug coverage for adults under 65 and targeted interventions to address CRMN among those with CVD risk factors to improve CVD outcomes.