

Is there a Gender Difference in Cost-related Medication Non-adherence?

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Editorial

Access barriers to medication have been a persistent challenge in care for the poor in the U.S.. According to a study funded by the Commonwealth Fund and the Henry J. Kaiser Family Foundation, twenty-six percent of the elderly did not take medication as prescribed due to a cost barrier [1]. The Medicare Part D outpatient prescription drug program, aiming to reduce access barriers to medication use, was seen to have increased medication utilization in the general Medicare population [2-4]. However, for those high-need patients with high-cost disease, multiple morbidities, and disabilities, access to medications has not been shown to improve after the implementation of the Medicare Part D [5-7]. In fact, researchers found that among the sickest subgroups of Medicare beneficiaries, cost-related medication non-adherence (CRN) rate has even worsened [8]. Hence, CRN remains a challenge in improving access to medication in the high-need, high-cost patient population.

Although the high CRN rate is alarming, no comprehensive framework of risk factors for CRN exists. Researchers have shown that lower income and high out-of-pocket costs for medications, poorer health status (including lower self-perceived general health), more comorbidities, and poorer mental health are strong risk factors for CRN, while having any, or more generous, prescription drug coverage significantly reduces the risk of CRN [9-12]. As the research is largely focused on insurance status and health, gender difference as a risk factor for CRN has received relatively little attention.

There is some evidence indicative of a gender difference in CRN in high-need, high-cost patient populations. For example, using a nationally representative sample of cancer survivors, researchers reported that females were 27% more likely to report CRN than males [13]. Since gender is a composite variable which is correlated with other risk factors such as functional status and resource utilization pattern, the independent factor of gender needs to be carefully explored. Another study, based on a nationally representative sample of cancer patients, found that males were 46% less likely to report CRN than their female counterparts, adjusting for race, ethnicity, an array of insurance variables including public, private and mixed public-private coverage, functional status including Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs), and prior hospitalizations [14]. These findings are consistent with a previous study examining a much larger population of elderly Medicare beneficiaries, among which females were 20% more likely to report CRN adjusting for other demographics, ADLs, general health perception, and drug coverage by the insurance plans [15].

The gender difference in CRN has some important implications for theory, practice, and policy. It is less clear if this is in part due to women being more price sensitive to out-of-pocket payment for

medication, having different perception of the effectiveness of medication, or having differential level of health literacy. Research is needed to advance understanding of the gender difference in the behavioral aspect of CRN [14]. It may also be more effective to consider a gender-specific intervention strategy to reduce CRN based on the above insights. Because females have a longer life expectancy than males, often with greater morbidities requiring multiple medication treatments, reducing CRN in females may also have larger, significant economic benefits as well.

In summary, a small body of literature is indicative of possible gender difference in CRN among high-need, high-cost patient population. A multi-thematic approach is necessary to develop effective strategies to identify those patients, target cost barriers to medications, improve patient health outcome, and reduce costs.

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