

Health behaviors and medication adherence



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Improving health behaviors is linked to positive health outcomes, which leads to increased disease control (WHO, 2017). The relationships between health behaviors and medication adherence are very important in achieving satisfactory treatment outcomes (Han et al., 2017). However, few studies have examined the relationships between health behaviors and medication adherence. Recent research in Jordan found that most patients with CAD did not adopt healthy behaviors, such as physical activity, healthy diet, smoking cessation, and medication adherence, to manage their disease, which put them at a higher risk of hospital readmission (Mosleh & Darawad, 2015). The results indicated when patients have poor healthy behaviors they are more likely to have poor medication adherence (Mosleh & Darawad, 2015).

In comparison, Han et al. (2017) conducted a study to examine the relationships between several health behaviors and medication adherence in patients diagnosed with hypertension, hyperlipidemia, and diabetes. Their results found that patients who reported following mild physical activity showed better medication adherence; patients who were not obese and were controlling their diet showed better medication adherence; and patients who were smokers had low medication adherence. These positive health behaviors are possible predictors of improved medical adherence, which in turn is associated with improved health outcomes (Han et al., 2017).

Similarly, Hempler et al. (2012) conducted a study to examine the relationship between long-term changes in dietary habits and physical activity behaviors and the initiation of preventive medications among patients with CAD. The study focused on smoking, diet, physical activity and alcohol consumption and data were collected in one, three and five years.

After five years, the result of the study found that when patients have positive changes in both physical activity and dietary habits over extended periods of time they were more likely to initiate lipid-lowering medications and blood pressure-lowering medications. The study concluded that patients who were able to change their health behaviors also were more likely to take their medication, rather than substituting them with behavioral changes (Hempler et al., 2012).

The finding that patients who practice healthy self-care behaviors were more likely to show better medication adherence are consistent throughout the current body of literature. Other studies were conducted using different chronic disease populations, such as patients with MI, HIV, Hepatitis C, and their findings support the relationship between positive health behaviors and improved medication adherence (Batool & Kausar, 2015; Lee et al., 2018; Pellowski & Kalichman, 2016). Given that these relationships are consistent across populations with chronic diseases, it is important to also conduct research studies specifically on patients with CAD that focus on patients' physical activity, diet, smoking cessation, and their relation to medication adherence as a way to ascertain whether CAD management shares these relationships or if there are others important to treating and managing CAD. The management and treatment of CAD in particular requires the modification of health behaviors such as physical activity, healthy diet, and smoking, as well as excellent medication adherence (Capewell et al., 2010; Ministry of Health, 2017; WHO, 2017).

References

- Batool, S. & Kausar, R. (2015). Health Related Behaviors and Medication Adherence in Patients with Hepatitis C. *Journal of Behavioural Sciences* , 25 (1), 172-186.
- Capewell, S., Ford, E. S., Croft, J. B., Critchley, J. A., Greenlund, K. J., & Labarthe, D. R. (2010). Cardiovascular risk factor trends and potential for reducing coronary heart disease mortality in the United States of America. *Bulletin Of The World Health Organization*, 88(2), 120-130. doi: 10. 2471/BLT. 08. 057885
- Han, E., Sohn, H. S., Lee, J.-Y., & Jang, S. (2017). Health Behaviors and Medication Adherence in Elderly Patients. *American Journal of Health Promotion: AJHP* , 31 (4), 278-286. <https://doi.org/10.4278/ajhp.150205-QUAN-709>
- Hempler, N. F., Krasnik, A., Pisinger, C., & Jørgensen, T. (2012). The relationship between changes in health behaviour and initiation of lipid-lowering and antihypertensive medications in individuals at high risk of ischaemic heart disease. *BMC Public Health* , 12 , 626-626. <https://doi.org/10.1186/1471-2458-12-626>
- Lee, Y.-M., Kim, R. B., Lee, H. J., Kim, K., Shin, M.-H., Park, H.-K., ... Park, K.-S. (2018). Relationships among medication adherence, lifestyle modification, and health-related quality of life in patients with acute myocardial infarction: a cross-sectional study. *Health and Quality of Life Outcomes* , 16 (1), 100. <https://doi.org/10.1186/s12955-018-0921-z>
- Ministry of Health (2017). *Coronary artery disease prevention and treatment* . Retrieved from. <https://www.moh.gov>.

sa/HealthAwareness/EducationalContent/Diseases/Heartcirculatory/Pages/004.aspx

- Mosleh, S. M., & Darawad, M. (2015). Patients' Adherence to Healthy Behavior in Coronary Heart Disease: Risk Factor Management Among Jordanian Patients. *The Journal of Cardiovascular Nursing* , 30 (6), 471-478. <https://doi.org/10.1097/JCN.0000000000000189>
- Pellowski, J. A., & Kalichman, S. C. (2016). Health behavior predictors of medication adherence among low health literacy people living with HIV/AIDS. *Journal of Health Psychology* , 21 (9), 1981-1991. <https://doi.org/10.1177/1359105315569617>
- World Health Organization [WHO] (2017). Cardiovascular disease. Retrieved from: http://www.who.int/cardiovascular_diseases/en/