



# Predictive Role of Health Literacy and Electronic Health Literacy on of Patients' Self-Care After Open Heart Surgery

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## ABSTRACT

**Introduction:** Coronary artery bypass grafting is a significant operation, and patients require close monitoring and immediate support post-surgery. To reduce operation complications, patients need self-care. The more accurate information patients have and effectively receive, the better they can perform self-care. Nowadays, information is readily available at minimal cost and time; however, finding a trustworthy and scientific source for health-related queries necessitates a certain level of health literacy. Additionally, with the advancement of information technology and easy access to resources, electronic health literacy has become a primary health objective. Therefore, this study aimed to determine the impact of health and electronic health literacy on the self-care of patients undergoing coronary artery bypass surgery at Yazd hospitals in 2023.

**Methods and Materials:** The present descriptive-analytical study was conducted on 192 participants who underwent open heart surgery at hospitals in Yazd. Participants were selected through availability sampling, including those who had undergone surgery at least one month prior. Data collection involved demographic information, health literacy, e-health literacy, and self-care questionnaires. Data analysis was performed using SPSS version 20 software.

**Results:** A total of 192 participants with a mean age of 63.35 ± 9.87 years (range 40-83) participated in this study. Of these participants, 59.4% were male and 40.6% were female. Also, 103 participants had a history of both diabetes mellitus and hypertension. The mean scores for health literacy, electronic health literacy, and self-care were 31.94 ± 3.93, 5.89 ± 16.47, and 128.42 ± 9.54, respectively. A statistically significant relationship was found among demographic variables such as residency, education level with health literacy, education level and occupation, income level with e-health literacy and education level, and income level with self-care; there was a statistically significant relationship. Furthermore, health literacy was found to predict patients' self-care ( $p = 0.001$ ).

**Conclusion and Discussion:** Participants had an average level of health and self-care literacy, but weak electronic health literacy. Promoting and expanding health literacy, mainly electronic health literacy, in society is necessary and can significantly benefit patients in practicing self-care behaviors.

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