

EHEALTH LITERACY AND MEDICATION ADHERENCE IN CHRONIC DISEASES: THE MEDIATING ROLE OF PATIENTS' BELIEFS

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OBJECTIVES

From the perspective of health information behavior, this study aims to explore the mechanism by which eHealth literacy influences medication adherence among patients with chronic diseases, and to provide evidence for optimizing health information services and implementing targeted interventions to improve adherence.

METHODS

A cross-sectional survey was conducted from November 2024 to August 2025 among **333** chronic disease patients recruited by convenience sampling from one community health center, one tertiary general hospital, and one specialized chronic disease hospital in Jinan, Shandong Province, China. Instruments included the eHealth Literacy Scale (eHEALS), the Beliefs about Medicines Questionnaire (BMQ), and the Morisky Medication Adherence Scale (MMAS-8). Pearson correlation analysis and structural equation modeling (SEM) were used to examine relationships and test the mediating role of medication beliefs.

RESULTS

- eHealth literacy mean score: **25.73 ± 7.49** , indicating a relatively low level; age, residence, education, occupation, marital status, monthly income, disease duration, health information seeking experience, and internet use frequency significantly affected eHealth literacy ($P < 0.05$).
- Medication adherence mean score: **5.23 ± 2.07** , with **57.36%** showing poor adherence; medication beliefs mean score: **5.19 ± 5.20**
- SEM revealed that eHealth literacy had a total effect of **0.158** on adherence, with a direct effect of 0.076, and the total indirect effect accounted for **52.2%** of the total effect.

Path	Effect	95% CI	p
Total effect	0.158	0.117-0.200	<0.001
Direct effect	0.076	0.031-0.123	<0.01
Indirect via necessity beliefs	0.018	0.004-0.037	<0.05
Indirect via concerns beliefs	0.065	0.036-0.104	<0.001

CONCLUSIONS

eHealth literacy directly affects medication adherence and indirectly influences it through medication beliefs. Interventions targeting vulnerable groups should improve digital health literacy, enhance the accessibility and credibility of health information, and cultivate rational medication beliefs.