

Digital Health Needs and Self-Management Barriers in Women with Polycystic Ovary Syndrome: A Qualitative Study to Inform Intervention Design

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Abstract

Objective: Polycystic ovary syndrome (PCOS) is a prevalent chronic endocrine–metabolic disorder that significantly affects women’s reproductive, metabolic, and psychosocial health. Long-term self-management of lifestyle behaviors is critical for improving outcomes. Despite increasing use of digital health technologies in chronic disease management, limited research has explored the lived experiences, behavioral challenges, and digital health needs of women with PCOS. This study aimed to examine these aspects and provide evidence to inform targeted digital health interventions. **Methods:** A descriptive qualitative design was employed. Fifteen women aged 20–33 years with clinically diagnosed PCOS participated in semi-structured interviews. Topics included disease understanding, self-management practices, perceived barriers, emotional experiences, and engagement with digital health tools. Data were analyzed using thematic content analysis to identify key themes and domains related to self-management and digital health needs. **Results:** Analysis identified two overarching domains: (1) barriers to effective self-management, including insufficient disease knowledge, difficulty maintaining consistent health behaviors, and emotional stress; (2) digital health support needs, including (a) personalized guidance and behavioral reminders, (b) user-friendly interfaces with integrated self-monitoring for diet, activity, and symptom tracking, and (c) motivational features and peer/community support to enhance adherence and engagement. Findings highlight the complex interplay of cognitive, behavioral, and psychosocial factors in PCOS self-management. **Conclusion:** Women with PCOS face multidimensional challenges to self-management. Digital health interventions integrating personalized guidance with social and community support may improve adherence to healthy behaviors and long-term outcomes. These insights provide practical guidance for developing patient-centered digital health tools and evidence-based health promotion strategies tailored to women with PCOS.

Keywords

Digital Health, Polycystic Ovary Syndrome, Health Behavior, Self-Management, Qualitative Study