



[Back](#)

Healing Environments and Women's Well-Being: A Systematic Review on the Role of Natural Light, Greenery, and Ventilation in Hospitals

[Studies in Systems, Decision and Control](#) • Book Chapter • 2026 • DOI: 10.1007/978-3-032-04378-8_15

[Hanouf, Wissal](#)^a; [Moulay, Amine](#)^b ; [Aripin, Srazali](#)^a; [Zakariya, Khalilah](#)^a

^aDepartment of Architecture, Faculty of Architecture and Environmental Design, International Islamic University Malaysia, Selangor, Kuala Lumpur, Malaysia

[Show all information](#)

This document is one of the chapters of a book series. [See all chapters](#)

0

Citations

[Full text](#) [Export](#) [Save to list](#)

[Document](#)

[Impact](#)

[Cited by \(0\)](#)

[References \(25\)](#)

[Similar documents](#)

Abstract

The impact of healing environments on women and their well-being in healthcare settings is underexplored. As women frequently use healthcare, especially for reproductive and family care, they have unique physiological and psychological sensitivities to the environmental condition. Accordingly, the current review evaluates the contribution of natural light, greenery, and ventilation as structural elements of healing environments in public hospitals with relevance to the well-being of women. Following the PRISMA guidelines, a standard systematic review was conducted based on peer-reviewed studies published in the databases: Scopus, ScienceDirect, Elsevier, Taylor & Francis, and Springer. Inclusion criteria featured research within the years 2012–2024 relating to hospital architecture, environmental psychology, and patient-centered design. Exclusion criteria included studies that had no gender-specific analysis or solely focused on private health facilities. A total of 32 articles were included in the final analysis. Results indicated that systemic barriers such as financial constraints, overcrowding, and old buildings hinder the application of healing environment principles at public hospitals, while private hospitals can use financial flexibility allowed for biophilic designs, optimize ventilation and

increase day-lighting levels. This review reveals that although the positive impact of natural elements on stress reduction, patient recovery, and psychological comfort is supported by literature, disparities between types of hospitals stress the importance of a policy-driven approach in public healthcare setting. The review highlights the lack of consistent frameworks for gender-responsive hospital design and calls for replicable and affordable interventions in public hospital settings to equitably promote access to healing environments. Further research may investigate flexible design solutions that bridge the gap between public and private clinical infrastructures, to better integrate health promoting environments for women across the globe. © The Author(s), under exclusive license to Springer Nature Switzerland AG 2026.

Author keywords

Biophilic design in healthcare; Healing environments; Hospital architecture; Women’s well-being

Corresponding authors

Corresponding author	A. Moulay
Affiliation	Department of Engineering, College of Engineering and Technology, Royal University for Women, Riffa, Bahrain
Email address	amoulay@ruw.edu.bh

© Copyright 2026 Elsevier B.V., All rights reserved.

Abstract

Author keywords

Corresponding authors

About Scopus

[What is Scopus](#)

[Content coverage](#)

[Scopus blog](#)

[Scopus API](#)

[Privacy matters](#)

Language

[日本語版を表示する](#)

[查看简体中文版本](#)

[查看繁體中文版本](#)

[Просмотр версии на русском языке](#)

Customer Service

[Help](#)

[Tutorials](#)

[Contact us](#)

ELSEVIER

[Terms and conditions](#) ↗ [Privacy policy](#) ↗ [Cookies settings](#)

All content on this site: Copyright © 2026 [Elsevier B.V.](#) ↗, its licensors, and contributors. All rights are reserved, including those for text and data mining, AI training, and similar technologies. For all open access content, the relevant licensing terms apply.

