# LETTER TO EDITOR The Nurse-led ZENN Intervention: A Community-based Strategy to Improve Selfcare among Kidney Transplant Recipients

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# **DEAR EDITOR**

The management of complications following kidney transplantation is crucial for ensuring long-term success, enhancing quality of life, and minimizing issues such as transplant rejection. The complexities of post-transplant care, including adherence to medication regimens and lifestyle changes, cause numerous challenges for patients. Therefore, planning for the management of these complications is of great importance. A comprehensive self-management educational program led by specialized nurses can serve as an effective intervention for managing complications in kidney transplant recipients. One of the innovative intervention strategies is ZENN (ZElfmanagement Na Niertransplantatie; Dutch acronym for self-management after kidney transplantation), which can be systematically utilized using the Intervention Mapping framework.<sup>1</sup>

The ZENN intervention is an approach which aims at promoting self-care among kidney transplant recipients. This intervention, conducted under a nurse-led structure, aims to empower patients to manage their health issues and address their medical and psychosocial care needs. The ZENN intervention focuses on several key components: assessing individual needs, setting SMART goals (Specific, Measurable, Achievable, Relevant, Time-bound), and utilizing evidence-based strategies to enhance motivation and self-efficacy.<sup>2</sup>

The holistic and supportive approach is one of the main advantages of the ZENN intervention. By focusing on various aspects of life, including physical, emotional, and social factors, this intervention encourages kidney transplant patients to consider all dimensions of their health and not limit themselves to a medical regimen. Studies have shown that this holistic approach is beneficial as it addresses the complexities of the lives of transplant patients, which include adapting to new lifestyle changes and managing upcoming challenges. Another significant advantage is the emphasis on empowering patients.<sup>3</sup> The ZENN intervention actively involves kidney transplant patients in the decision-making processes for their care plans, allowing them to incorporate personal goals and realistic plans that fit their circumstances into their care regimen. The result of this empowerment is an increase in intrinsic motivation, which leads to enhanced self-efficacy among patients.<sup>4</sup> In addition, the ZENN intervention is provided by specialized nurses who are well-trained to offer comprehensive support. It has been shown that specialized nurses are more successful in fostering relationships with patients and addressing their psychosocial needs.

Copyright © 2025 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. This supportive environment significantly enhances trust between patients and healthcare providers, increasing patients' willingness to discuss sensitive topics such as medication adherence and emotional issues.<sup>5</sup> Studies have shown that the ZENN intervention has positive outcomes in terms of quality of life and medication adherence in kidney transplant patients.<sup>1,3</sup> Participants in the intervention reported improved self-management skills and rated the quality of care received higher than the control group, indicating the effectiveness of the intervention.<sup>6</sup>

Despite its numerous advantages, the ZENN intervention faces challenges in its implementation that may limit its effectiveness. Firstly, executing a comprehensive self-management program requires financial and human resources, including time, trained personnel, and ongoing support systems. Nurses must undergo extensive training to effectively deliver the intervention, which can place additional strain on healthcare systems that are already dealing with a high patient load.<sup>2</sup> Additionally, this intervention heavily relies on patients' motivation to actively participate in the program. Some patients may not be ready or able to engage actively, especially in the first-year post-transplant, when they may be coping with the physical and emotional challenges associated with their new condition.<sup>4</sup> In addition, the ZENN intervention has primarily been studied in single-center studies, which raises ambiguities regarding the generalizability of the findings.<sup>2,4</sup> On the other hand, evidence supporting the sustainability of the benefits of this strategy in the long term is limited. Continuous monitoring and follow-up studies are essential to determine whether the initial gains in self-management behaviors and quality of life are maintained over time.<sup>1</sup>

In conclusion, it can be said that the ZENN intervention, led by a nurse, is an effective strategy for improving knowledge and self-care behaviors among kidney transplant recipients. Although this strategy has some limitations during its implementation, the benefits of using this strategy provide a strong justification for employing this intervention. By implementing the ZENN intervention, which is an important step in developing comprehensive and patient-centered care, the quality of life for kidney transplant patients can be enhanced, and additional costs to the healthcare system can be prevented.

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## **Conflict of Interest**

None declared.

#### **Declaration on the Use of AI**

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