

Perspective

To What Extent Do Nurses Use Clinical Trials in Their Practice?



Salam Bani Hani¹ & Abdulqadir J. Nashwan^{2*}

¹*Department of Adult Health Nursing, Faculty of Nursing, Al al-Bayt University, Al-Mafraq, Jordan*

²*Department of Nursing, Hazm Mebaireek General Hospital, Hamad Medical Corporation, Doha, Qatar*

Article Info

Abstract

Article history:

Received:

07 December 2021

Accepted:

25 February 2022

Due to the growing global need for clinical trials, the number of nurses working as research nurses or research coordinators has increased during the last two decades. This paper discusses the potential role and contribution of nurses in conducting high-utility nursing clinical trials. More work is still needed to optimize the knowledge and skills of nurses working in the field of clinical trials.

Keywords:

clinical trial, nurse,

nursing research,

evidence-based

practice

*Corresponding Author:

e-mail: nursing861@gmail.com



This work is licensed under a Creative Commons Attribution 4.0 International License.

BACKGROUND

Initially, nursing research was based on difficulties that arose during practice. Nurses in practice are expected to have extensive knowledge, to do research, and to back up their practice with evidence. Clinical trials are an important aspect of nursing research because they provide the best evidence to inform nursing practices [1, 2]. Nurses are encouraged to learn more about clinical trials and to be actively involved in leading, facilitating, and conducting clinical trials [3].

Many researchers, academicians, and nursing students question whether the nursing practice is grounded on the best available scientific evidence [4]. However, a research-practice gap between study evidence findings and authentic practice is confirmed. This implies that nursing practice is completely disconnected from nursing research [5]. Despite the enormous quantity and easily accessible clinically relevant researches, there was slow uptake or failure to adopt such evidence in clinical practice [6]. Several factors contributed to the gap between research and practice which limit research utilization effectively including; lack of collaboration between researchers, educators, and practitioners, poor communication and utilization of research findings, nurses lack of knowledge about research role in improving patient outcomes, nurses attributes, and lack of time [7]. These factors argued that we don't know to what extent nurses utilize research findings in the context of their practice, therefore the effectiveness of nursing interventions in certain conditions is questionable.

Clinical trials are an essential component of health research advancement since they are concerned with providing the best possible and less biased evidence [8]. Furthermore, clinical trials contribute significantly to the generalization of information about health and illnesses, as well as the investigation of approaches that may increase the ability to predict, diagnose, treat, and offer effective care to patients [9]. Clinical trials are critical for improving human health since they are the most reliable means to determine if therapeutic or preventive interventions are helpful and safe for various diseases such as cardiovascular disease, asthma, and cancer [10]. Many reasons have invigorated researchers to conduct clinical trials in nursing and other health sciences fields, including the generation of significant scientific data that leads to better treatment and improved therapeutic regimens, as well as the revolutionization of modern science because it serves to help a large proportion of the diseased population [11].

Nursing interventions are measures taken by nurses to alleviate particular health issues such as symptom relief, pain reduction, and the incorporation of holistic care that includes physical, psychological, spiritual, and social requirements. Nursing interventions, on the other hand, are not considered curative, although they do aid in the healing process. Therapeutic interventions, on the other hand, are efforts undertaken by a person or group to enhance their well-being [12].

Nurses are the frontline caregivers in health care systems, and they have a remarkable influence on patient outcomes

[13]. Many studies have been conducted to investigate the relationship between nursing interventions and patient outcomes, with increasing evidence confirming nurses' contribution to patient outcomes. For instance, Ness and Royce [9] conducted a study with the goal of shedding light on clinical trials and providing an overview of oncology nurses' roles in enhancing clinical trials, they revealed that genomic reporting and the increase of molecularly guided mediators resulted in novel planned oncological clinical trials. They also establish the critical role of oncology nurses in executing clinical trials, which directly benefit patients with cancer [9].

Furthermore, numerous methods were utilized to assess the influence of nurse intervention on both the process and the results of nursing intervention. Nursing interventions have a positive impact on the elderly in terms of improving cognitive and functional status; improving cardiovascular health through smoking cessation and hypertension; symptom management in chronic diseases; pressure ulcer prevention and alleviation; and neonatal developmental care [14-16]. While there is a large body of research, the influence of nursing interventions on individual patient outcomes is not entirely understood [17].

Nursing and other therapeutic treatments have a significant influence on patient outcomes. However, few would employ the challenging work of nursing if they were not compensated for their effort in clinical settings. Similarly, the nursing profession cannot emerge as the primary component of the healthcare workforce

unless it is believed that nurses will make a valuable contribution to patient care [18]. Hence, there is a gap in integrating nursing care with other professions collaboratively since there was a delineation of nurses' involvement in clinical trials. As a result, nursing and other therapeutic interventions should go hand-by-hand without disrespect for any type of therapeutic intervention. The randomized clinical trial design might be used to investigate the relative effectiveness of nursing interventions. The trial is a precise method of experimentation that has long been used in pharmaceutical and clinical studies. Nursing literature includes a prediction of attrition rates in clinical studies, a review of quality reports of trials, and strategies to teach nursing students to develop trials [19]. Moreover, as compared to medical research, the number of clinical trials nursing research that used randomized clinical trials is in the infantile stage. Nursing intervention research is distinct from other types of therapeutic treatments. Furthermore, due to fundamental differences between nursing and medical practice, the nursing function has several constraints in employing clinical trials. Furthermore, the feasibility and appropriateness of nursing treatments in clinical trials should focus on their application, usefulness, adaption, acceptance, integration, and development [20].

The primary goal of clinical trials is providing the best available evidence, which is a vital component of enhanced patient care. [21]. It makes a significant contribution to the translation of drugs, technologies, behavioral interventions, and other diagnostics and interventions into clinical practice. Since

2000, the number of nursing clinical trials has more than doubled, raising the challenge of how to use research findings in clinical practice to enhance patient quality of care. Nursing trials are also tackling multiple levels in explanatory and pragmatic RCTs. Explanatory trials, on the other hand, sought to explain how treatments were tested under certain conditions, whereas practical trials sought to answer the question, "Which therapy is more efficient?" As a result, practical studies are designed to control the outcome of an intervention in the normal care context where it would be used [22].

Fortunately, conducting clinical trials in the nursing field proved the evidence to use the most effective and efficient procedures that guarantee the highest quality of care. However, many scholars show disrespectful behavior on the nature of nursing intervention when it is undergoing clinical trials. However, the nurses' practice involves a high level of human collaboration. On a day-to-day basis, nurses are encompassed in multiple tasks that entail testing even the simple interaction with patients and clients to reach the best care standards [23].

From a nursing lens, they were highly pleased with many prospects to acquire and advance innovative skills. It is positively impacting their autonomy and professional status which will affect patient-centered care indirectly. Nurse researchers have a great role in clinical trials since they must work in complex situations and across several specialties. Besides, they must be a patient advocator to ensure that they are supported throughout the research direction. The main role of the research nurse is widely disrupted

and involves a wide range of skills, including teaching, educating, communicating, project management, and information allocation [24].

The activities involved in the implementation of clinical trials are crucial to the generation of knowledge, regarding both medical treatment and nursing care. However, the incompletion in conducting clinical trials in nursing will affect patient outcomes and nurses negatively. Patients who had specific diseases and conditions would not reach the best treatment if they did not participate actively in being a part of clinical trials taking into account safety and ethical consideration. Similarly, if nurses did not engage in clinical trials, they will work in their clinical settings using the traditional method that was far from updating knowledge and not based on best practice care.

CONCLUSION

The potential role of nurses while conducting clinical trials is still debatable. Research nurses must have a solid understanding of the clinical trial research procedure as well as in-depth knowledge of the specialty being investigated. Nurses play an important role in becoming active advocates for their patients, ensuring that they are safe, protected, and adequately supported during the clinical trials. Advanced research methodology, project management, and communication skills are required for research nurses who are intended to work in clinical trials.

REFERENCES

- [1] C. Barlow and H. M. Farrar, "The role of the clinical trial nurse in Oklahoma," *The Oklahoma Nurse*, vol. 58, pp. 4-4, 2013.
- [2] A. S. Mohamed, R. C. C. Villar, and A. J. Nashwan, "Clinical trials history & trends in Qatar," *Journal of Emergency Medicine, Trauma and Acute Care*, vol. 2021, p. 34, 2021.
- [3] L. M. Friedman, C. D. Furberg, D. L. DeMets, D. M. Reboussin, and C. B. Granger, "Introduction to clinical trials," in *Fundamentals of clinical trials*, ed: Springer, 2015, pp. 1-23.
- [4] T. Omer, "Research utilization in a multicultural nursing setting in Saudi Arabia: barriers and facilitators," *Journal of Nursing Research*, vol. 20, pp. 66-73, 2012.
- [5] M. J. Leach and B. Tucker, "Current understandings of the research-practice gap in nursing: a mixed-methods study," *Collegian*, vol. 25, pp. 171-179, 2018.
- [6] J. E. Squires, A. M. Hutchinson, A.-M. Boström, H. M. O'Rourke, S. J. Cobban, and C. A. Estabrooks, "To what extent do nurses use research in clinical practice? A systematic review," *Implementation science*, vol. 6, pp. 1-17, 2011.
- [7] R. Steens, T. Van Regenmortel, and K. Hermans, "Beyond the research-practice gap: The development of an academic collaborative centre for child and family social work," *The British Journal of Social Work*, vol. 48, pp. 1611-1626, 2018.
- [8] C. Grady and M. Edgerly, "Science, technology, and innovation: nursing responsibilities in clinical research," *The Nursing clinics of North America*, vol. 44, p. 471, 2009.
- [9] E. A. Ness and C. Royce, "Clinical Trials & the Role of the Oncology Clinical Trials Nurse," *The Nursing Clinics of North America*, vol. 52, p. 133, 2017.
- [10] C. Andrade, "The primary outcome measure and its importance in clinical trials," *The Journal of clinical psychiatry*, vol. 76, pp. 1320-1323, 2015.
- [11] S. Simmons, B. Resnick, J. Schnelle, and J. G. Ouslander, "Clinical trials in nursing homes: challenges and practical solutions," *Clinical Trials in Older Adults*. Chichester, UK: John Wiley & Sons Ltd, pp. 231-253, 2015.
- [12] H. K. Butcher, G. M. Bulechek, J. M. M. Dochterman, and C. M. Wagner, *Nursing interventions classification (NIC)-E-Book*: Elsevier Health Sciences, 2018.
- [13] L. Tuominen, M. Stolt, R. Meretoja, and H. Leino-Kilpi, "Effectiveness of nursing interventions among patients with cancer: An overview of systematic reviews," *Journal of clinical nursing*, vol. 28, pp. 2401-2419, 2019.
- [14] J. Y. Lee, H.-A. Park, and Y. H. Min, "Transtheoretical model-based nursing intervention on lifestyle change: a review focused on intervention delivery methods," *Asian nursing research*, vol. 9, pp. 158-167, 2015.
- [15] Z. Mallah, N. Nassar, and L. K. Badr, "The effectiveness of a pressure ulcer intervention program on the prevalence of hospital acquired pressure ulcers: controlled before and after study," *Applied Nursing Research*, vol. 28, pp. 106-113, 2015.

- [16] S. Burke, "Systematic review of developmental care interventions in the neonatal intensive care unit since 2006," *Journal of Child Health Care*, vol. 22, pp. 269-286, 2018.
- [17] L. B. Bolton, N. E. Donaldson, D. N. Rutledge, C. Bennett, and D. S. Brown, "The impact of nursing interventions," *Medical Care Research and Review*, vol. 64, pp. 123S-143S, 2007.
- [18] T. Jones, "Outcome measurement in nursing: Imperatives, ideals, history, and challenges," *OJIN: The Online Journal of Issues in Nursing*, vol. 21, pp. 1-11, 2016.
- [19] C. L. Gilliss and I. L. Kulkin, "Monitoring nursing interventions and data collection in a randomized clinical trial," *Western Journal of Nursing Research*, vol. 13, pp. 416-422, 1991.
- [20] A. Mackey and S. Bassendowski, "The history of evidence-based practice in nursing education and practice," *Journal of Professional Nursing*, vol. 33, pp. 51-55, 2017.
- [21] L. M. Friedman, C. D. Furberg, D. L. DeMets, D. M. Reboussin, and C. B. Granger, *Fundamentals of clinical trials*: Springer, 2015.
- [22] F. Devos, F. Foissac, N. Bouazza, P.-Y. Ancel, J.-M. Tréluyer, and H. Chappuy, "Study characteristics impacted the pragmatism of randomized controlled trial published in nursing: a meta-epidemiological study," *Journal of clinical epidemiology*, vol. 116, pp. 18-25, 2019.
- [23] M. Gleeson and F. Timmins, "A review of the use and clinical effectiveness of touch as a nursing intervention," *Clinical Effectiveness in Nursing*, vol. 9, pp. 69-77, 2005.
- [24] J. MacArthur, G. Hill, and D. Callister, "Professional issues associated with the clinical research nurse role," *Nursing Standard*, vol. 29, p. 37, 2014.