

Holistic, Integral/Integrated, and Systemic: Implications for Clinical Research

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Abstract

Research is based on the scientific method, which consists of the systematic study of nature and includes observation techniques, rules of reasoning and prediction, ideas about planned experimentation, and ways of communicating experimental and theoretical results. Furthermore, research possesses a series of characteristics that facilitate the researcher's effective management

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Introduction

Clinical research is defined as the branch of health sciences that studies human beings (or samples of human origin) to generate scientific knowledge aimed at understanding, detecting, treating, and preventing diseases. Unlike basic research (conducted in laboratories with cells or animals), clinical research directly involves people [1]. The term research is used to refer to an activity of discovering, developing, and testing knowledge. From the researchers' perspective, it is necessary to generate new knowledge with sufficient consistency so that its consequences have a fundamental impact on the nature of everyday practice. Conventional quantitative-objective medical research only has methods to measure separate parts of the whole; however, the study of the body is the study of the individual's wholeness in relation to their context [2]. In clinical science, what we choose to measure—the outcomes of a medical intervention—reveals much about our priorities and the underlying power structures that shape clinical or research work [3]. Research originates from ideas that humans generate, related to a given situation in a fact, process, or phenomenon of nature, society, or thought. These ideas, therefore, constitute the first approach to the object of reality that will be investigated [4, 5]. Research is based on the scientific method, which consists of the systematic study of nature and includes observation techniques, rules of reasoning and prediction, ideas about planned experimentation, and ways of communicating experimental and theoretical results. Furthermore, research possesses a series of characteristics that facilitate the researcher's effective management. While there is a wide variety of opinions on the meaning of the research process, the common denominator consists of the following elements: the topic to be investigated,

the problem to be solved, and the methodology to be used [6]. The biomedical scientist and the practicing physician, "like builders of Gothic cathedrals", must learn from materials, techniques, and history; they must have a sensitivity to nature in order to constitute a coherent society. They also need to perceive the mysteries of life, using instruments of reflection on the Universe and on oneself that unite reason and intuition. They must achieve a proportion or harmony between the parts and the whole, a "sense of the essential." They must attain a kind of knowledge as subtle, as powerful, and as serene as a Gothic cathedral. The Gothic cathedral represents the union between heaven and earth. The physician must seek the union of body and mind [7]. Leading research institutions, such as the National Institutes of Health (NIH), classify Clinical Research Types into three main areas: 1. Patient-oriented research: Includes the study of human disease mechanisms, therapeutic interventions (clinical trials), and the development of new health technologies [8, 9]; 2. Epidemiological and behavioral studies: Analyze the frequency and determinants of diseases in populations, as well as behaviors that affect health [10, 11]; and 3. Health services and outcomes research: Evaluates the effectiveness of medical practices and the impact of interventions on quality of life and healthcare costs [12, 13]. The main objectives of clinical research can be grouped into: Safety and Efficacy (Determining whether new drugs, vaccines, or medical devices are safe for human use and whether they actually fulfill their function); Improvement of Quality of Life (Seeking ways to alleviate symptoms, improve rehabilitation, and palliative care); and Prevention (Identifying risk factors and developing methods to prevent diseases from appearing or progressing). There is a direct and profound relationship

between modern clinical research and the concepts of holistic, comprehensive/integrated, and systemic, which are not only philosophical but also define the methodology and scope of the studies [14]. Holistic (“whole,” “entire”; “the whole is more than the sum of its parts”) and comprehensive/integrated (“total” or “complete”; something that encompasses all the elements necessary to be complete. It seeks to leave “no stone unturned,” ensuring that every specific aspect is addressed) are synonymous terms in practice, and both refer to considering something as a whole, complete, or total. Both approaches seek to understand the interconnectedness of all parts (physical, mental, emotional, and spiritual) rather than focusing on just one of them. But, although often used interchangeably, holistic and comprehensive have different philosophical and practical nuances [15]. The main distinction lies in whether the approach focuses on the “whole” as a unit (holistic) or on the “sum of all parts” to complete a system (comprehensive). That is, holistic focuses on

interconnectedness (e.g., a holistic approach to health; i.e., looking at the whole individual) [16], and comprehensive focuses on full coverage (e.g., a comprehensive review of the data, leaving no detail out) [17-20]. Finally, systems thinking is a holistic and comprehensive approach that analyzes the interconnected elements of a system to understand its complexity [21].

Clinical medical research with holistic, comprehensive, and systems approaches involves treating the patient as a whole (mind, body, environment) rather than just symptoms, combining conventional medicine with complementary therapies, and analyzing the interconnections of biological, social, and psychological factors. This promotes personalized care, prevention, patient empowerment, and a higher quality of life. Thus, holistic, comprehensive/integrated, and systemic approaches in clinical research have their own characteristics that can be described and they have implications for clinical research (TABLE 1):

Concept	Main Focus	Implication in Clinical Research	Practical Application in Research
Holistic	The "Whole" Patient	"Complete Person" Studies (mind-body-spirit)	Studies of total well-being and optimal quality of life
Comprehensive/Integrated	-Inclusion of dimensions -Combination of therapies	Combination of conventional and complementary medicine	-Bioethics and personalized medicine based on AI and genetics -Trials that validate conventional plus complementary medicine
Systemic	Interconnections	Research in Health Systems and Biological Networks	Analysis of interdependent biological and social systems

Table 1: Implications Of the Concepts of Holistic, Comprehensive/Integrated, And Systemic in Clinical Research.

1. The holistic approach. Holism posits that the system (the patient) cannot be explained solely by the sum of its isolated parts. The holistic approach may include: A) Comprehensive care of the human being: The patient is considered in their physical, mental, social, and spiritual dimensions. The holistic approach translates into investigating the "health of the whole person" [22]; B) Going beyond the symptom: Seeking the root causes of disease and not just symptom suppression; and C) Improving quality of life: Seeking overall emotional and physical well-being. It does not study just one organ or an isolated disease, but the interconnection between biological systems, psychological and social factors. Its implications for research are that investigations focus on the multiple dimensions of the individual: physical, mental, emotional, social, and spiritual. Thus, one trend in clinical research is the strong interest in holistic longevity, where research not only seeks to cure diseases, but also to optimize "healthy life expectancy" through functional nutrition, brain health, and stress resilience. Holistic research uses "Whole Systems Research Methods" that assess overall well-being and multidimensional outcomes, not just a specific biomarker. This aligns with trends that emphasize "fit-for-purpose" research designs to study effectiveness in the real world of complex and personalized clinical interventions, Whole Systems Research has established itself as a developing academic discipline. This field is distinguished by its salutogenic, patient-centered approach and its commitment to non-biomedical diagnostic and treatment frameworks. The rigorous pursuit of model validity can be further advanced by emphasizing complex analytical models, paradigm-specific outcome assessment, inter-rater reliability, and ethnographically based designs [23].
2. The Holistic/Integrated Approach. Although often used interchangeably, these terms have distinct technical nuances in current clinical practice: Holistic: Refers to an inclusive vision that encompasses all dimensions of being (psychological, cultural, ecological). This implies hyper-personalization based on biomarkers and AI-powered analyses. Integrated/Integrative: Focuses on combining conventional medicine with evidence-based complementary therapies (such as acupuncture or nutrition). The Holistic/Integrated Approach (Integrative Medicine) includes: 1) Combination Therapy: Combining evidence-based conventional medicine with appropriate complementary techniques; 2) Personalization: Adapting treatments to the specific needs of each individual; 3) Doctor-Patient Relationship: Based on a partnership where the patient actively participates in their healing; and 4) Focus on Prevention: Promoting healthy habits and the proactive prevention of chronic diseases. Its implications for research are the integrative reviews that combine experimental data (clinical trials) with theoretical and qualitative studies to generate new frameworks. Thus, for example, the NIH funds studies on Integrative Clinical Research, where the sum of these pieces improves outcomes in patients with chronic pain or cancer [24].
3. The Systemic Approach. This approach views the patient as an open system in constant interaction with their environment, seeking to understand the interconnections between its elements. The systemic approach includes: A) Interconnections: Understanding the body as a complex system, analyzing how different parts interact with each other and with the environment; B) Multicausal Analysis: Recognizing that health is influenced by multiple factors, including the community and the social environment; and C) Holistic View: Allowing for a deeper understanding of chronic diseases by not

isolating them in a single organ or system. The systemic care model implements structured interdisciplinary rounds and shared decision-making platforms integrated into electronic health records for a 360° view of the patient. Its implication for research is that it moves away from linear causality (one cause, one effect) to study complex networks. For example, systemic research analyzes how the gut-brain axis or the somatic nervous system influences chronic diseases. Likewise, the Health Care Systems Research Collaboratory (NIH): Investigates how to implement interventions in real health settings, considering the hospital as a dynamic system; Systems Medicine applies systems thinking to human biology to understand disease as a network of molecular and environmental interactions [25, 26]. In short, holistic, comprehensive/integrated, and systemic approaches strengthen research by improving treatment adherence, reducing side effects, and fostering a person-centered view of health. In clinical medical research in 2026, the concepts of holistic, comprehensive/integrated, and systemic represent a paradigm shift from traditional reductionism to approaches that consider the complexity of human beings and their environment.

References

- (2025). Putting science to work for the health of women. *NIH Definitions*.
- Turabian JL. (2025). Identifying the Most Appropriate Methods for Generating Evidence in General Medicine: Biomedical and Biopsychosocial Research. *Associat J Health Sci.*; 3(5): AJHS. 000575.
- Turabian JL. (2024). Reflections on the Concept of Result of a Medical Intervention. *Clinical Trials and Clinical Research.*; 3(4).
- Turabian JL. (2018). Reflections on Imaginative Methodology in Research. *Journal of Public Health and General Medicine.*: 1(1): 2-2.
- Turabian JL. (2018). Selecting a topic for research in general medicine. *Trends Gen Pract.*; 1.
- Jose Luis Turabian. (2018). Looking for the Best Journey: Real Methodology of Research in General Medicine. *International Journal of General Practice.*; 1(1):1-7.
- Turabian JL. (2018). Medical Advancements Associated With Biomedical Science Must Be So Slender, As Powerful, and As Serene As a Gothic Cathedral. *Br Biomed Bull.*;6(1):e309.
- Baumgardner DJ. (2019). Defining Patient-Oriented Research for the Average Person (and Potential Research Partner). *J Patient Cent Res Rev*;6(1):4-6.
- Poitras ME, Poirier MD, Bosma R, et al. (2024). Integration of patient-oriented research principles in health institutions: a scoping review protocol. *BMJ Open.*; 4;14(12): e082729.
- Sallis JF, Owen N, Fotheringham MJ. (2000). Behavioral epidemiology: a systematic framework to classify phases of research on health promotion and disease prevention. *Ann Behav Med.*;22(4):294-8.
- Bauch C, d'Onofrio A, Manfredi P. (2012). Behavioral Epidemiology of Infectious Diseases: An Overview. Modeling the Interplay Between Human Behavior and the Spread of Infectious Diseases.; 28:1–19.
- Badia X, del Llano J. (2000). [Health outcomes research]. *Med Clin (Barc).*;114 3:1-7.
- Selby P, Autier P. (2011). The impact of the process of clinical research on health service outcomes. *Ann Oncol*;22: vii5-vii9.
- (2018). Technical series on primary health care. Integrating health services. *World Health Organization*.
- RedKiwi. (2026). [Synonyms in Detail: Use and Differences of holistic and integral].
- Turabian JL. (2018). Approach Based on Holistic Model in General Medicine and Public Health: The Ice Cream Cone Effect. *SF J Pub Health.*; 2:3.
- Turabian JL. (2018). Concept of Integrality in General Medicine. *Arch Fam Med Gen Pract.*; 3(1):54-57.
- Perez Franco B, Turabian JL. (2003). [Experiences working with “comprehensive” clinical cases for practice and training in general medicine]. *Aten Primaria.*;31(6):400
- Turabian JL. (2017). A Short Collection of Fables for Learning the Fundamental Principles of Family Medicine: Chapter 1. Comprehensiveness, Continuity, Contextualization and Family. *Arch Fam Med Gen Pract.*; 1(2):32-39.
- Turabian JL. (2017). Stories Notebook about the Fundamental Concepts in Family Medicine: Comprehensiveness and Integrality, The Fable of The Tree and The Grass. *J Gen Pract (Los Angel).*; 5:284.
- Thelen J, Sant Fruchtmann C, Bilal M, et al. (2023). Development of the Systems Thinking for Health Actions framework: a literature review and a case study. *BMJ Glob Health.*;8(3): e010191.
- Wood MS, Brazin LR. The Guide to Complementary and Alternative Medicine on the Internet. Routledge, 2003.
- Ijaz N, Rioux J, Elder C, Weeks J. (2019). Whole Systems Research Methods in Health Care: A Scoping Review. *Journal of Alternative and Complementary Medicine.*; 25(S1): S21-S51.
- Gannotta R, Malik S, Chan AY, Urgun K, Hsu F, Vadera S. (2018). Integrative Medicine as a Vital Component of Patient Care. *Cureus.*;10(8): e3098.
- Makoni L, Manduna IT, Mbiriri AL. (2024). A review of whole-medical systems and holistic care approach for type 2 diabetes and associated metabolic syndrome. *J Integr Med.*; 22(3): 199–209.
- Richesson RL, Marsolo KS, Douthit BJ, et al. (2021). Enhancing the use of EHR systems for pragmatic embedded research: lessons from the NIH Health Care Systems Research Collaboratory. *J Am Med Inform Assoc.*;28(12):2626-2640.

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