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Editorial

What Constitutes "Clinical" Research?

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Before we can understand the true nature of clinical research, we must first define the term "research" itself. An overarching definition of research is that it is "the systematic investigation into and the study of things in order to establish facts and reach new conclusions." In other words, we're trying to figure something out [1]. Generally, whenever people are asked about their interpretation of research, the first thing that often comes to mind is medical or scientific research. Then again, who can blame them? With more than 40,000 medical research studies underway at any given time, it is easy for us to "pigeon-hole" research; thereby, limiting it to only these disciplines. Research is used in a variety of different professional settings; including academia, business, and public health, just to name a few. In fact, research can take on a variety of different forms, including studies that use surveys to gather information about individual or group habits, opinions, and beliefs. Others are observational in nature and are designed with the purpose of providing fresh insights into human behavior. Here, the researcher essentially "observes" the way in which people interact with one another or react to certain situations [2]. Clinical research will often use these methods, along with clinical trials, to gather information for the betterment of human health. According to the National Institutes of Health, the purpose of clinical research is "to advance medical knowledge by studying people, either through direct interaction or through the collection and analysis of blood, tissues, or other samples" [3]. In other words, it is the study of how to prevent, diagnose and treat illness in people. Depending on what researchers are studying, there are various types of clinical research. For instance, screening research explores ways to detect certain disorders or health conditions. This differs from diagnostic research which looks to improve the ways to identify a particular disorder or condition. The purpose of genetic research is to identify and seek an understanding of the connection between genes and illnesses so that disorders can be better predicted. Quality of life research looks at ways to improve the comfort and wellbeing of individuals with a diagnosed chronic illness, while epidemiological research explores the patterns and causes of disorders and diseases in groups of people. Treatment research often includes some sort of medical intervention to treat a diagnosed illness or condition (e.g., medication, new approaches to surgery, psychotherapy, etc.). On the other hand, prevention research is intended to seek ways to prevent disorders or diseases from developing or returning [4]. As new and emerging scientific discoveries open up new possibilities for patient care, we find that the world of clinical research is constantly evolving. Unfortunately, studies show that less than fifty percent of all medical treatments being delivered worldwide are supported by sound evidence. In fact, the same research indicates that the United States not only falls short when it comes to addressing the disparity in medical evidence, it also lacks clear prioritization when it comes to allocating the appropriate resources to fill the gaps in clinical research [5]. This obviously poses a significant problem for patient safety and overall quality of care. The contemporary health care environment is one that is viewed as a complex interaction among several variables, including the disease process itself, technology, policies and procedures, and the clinical team as a whole. Therefore, whenever care falls short - whether because of resource allocation or the lack of appropriate standards – unanticipated and harmful outcomes/errors can occur [6]. One of the most effective ways to prevent such catastrophic events from occurring is by adopting practices that result from evidence-based clinical research. Good clinical practice is the result of a painstaking and well-thought-out process that incorporates the use of the most up-to-date evidence, coupled with clinical expertise and patient values. As a matter of fact, the most successful clinical practices are those that are based on empirical evidence derived from randomized-controlled trials; descriptive and

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qualitative research; as well as case studies and the opinions of subject-matter experts in the field. As more research is carried out in a specific clinical area, the findings should then be integrated – hardwired, if-you-will – into clinical practice. Unfortunately, there is no "magic bullet" for converting what is known from clinical research into the actual practice environment. In fact, history has revealed that what might work in one clinical setting may or may not necessarily work in another one. This suggests that context variables have a significant bearing on the successful implementation of evidence-based practices [7]. Clinical research is a fluid process that is constantly evolving as the face of health care continues to change. For this reason, there is no "cookie-cutter" way of guaranteeing that your research will result in improving patient outcomes in the contemporary health care setting. Therefore, it will take a unified, global approach to clinical research that involves a variety of different health care disciplines to truly change the way care is being delivered.

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