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Critical Realism: Tenets and Application in Nursing

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Abstract:

Nursing is a distinct scientific professional discipline, with a specific body of knowledge obtained through research and clinical practice. Today, a PhD nursing scholar is entrusted with shaping and preserving the quality and vitality of professional nursing. Evidences that are assembled from diverse paradigms of inquiry, nursing theories and philosophies are more fitted to address the basic question of theory practice gap in nursing discipline. Moreover, today's health and healthcare practices are multifaceted and professional nursing practice entails knowledge development to support this intricacy. Critical realism is one of the philosophical approaches that challenge such complexities and enables nurse researchers to work collaboratively across various disciplines and methods (Clark, Lissel and Davis, 2008).

1. Introduction

This paper will look forward to explore the main tenets of critical realism and its influence on the development and the application of knowledge and research in nursing profession. Essential arguments in support of critical realism of science as the fundamental paradigm for the pursuit and development of nursing knowledge will be presented throughout the paper. I will move the dialogue forward by exploring Roy Bhaskar's interpretation of critical realism as one of the reasonable choices for acknowledging the philosophical debate that has challenged nursing science for centuries. The tenets of critical realism have bestowed nursing science the foundational philosophical discourse and it has aptly guided the discipline for the development of nursing knowledge. Hence, I will also thrash out the amalgamation of critical realism as an essential philosophical view in the refinement of nursing science and its influence for the discovery of novel nursing acquaintance and building organization in research and a science without precincts.

2. Philosophy of Critical Realism

Critical realism is an approach that is concerned with building theories that account for events in the real world (Wainwright, 1997). Nursing is becoming a dynamic and vibrant discipline of scientific investigation encircling innovative theoretical and clinical knowledge and multidisciplinary research approaches. Critical realism is a new philosophical perspective that presents a radical alternative to the established paradigms of positivism and interpretivism (McEvoy and Richards, 2006). Critical realism is a philosophy of science which holds the belief that acquiring knowledge about the external world is possible independently of the human mind or subjectivity. Critical realists identify the existence of logical association between ontological, epistemological and methodological premises that underlie their work. (Lipscomb, 2008). It is a philosophical view of knowledge that is founded upon a priori truths about the nature of the world (McEvoy and Richards, 2006). Critical Realism is concerned with questions and the formulation of an ontology that is capable of describing a world where change is essential. It is an ontology which states that the structures creating the world cannot be directly observed. In order to divulge the mechanisms that cause the appearance of these structures, theories must be formulated (Wainwright, 1997).

The origin of critical realism philosophy lies with Roy Bhaskar who is also considered the father of critical realism (Bhaskar, 1975, 1979). Traditional realists advocate a philosophy based on the objective truth and using objective verification as an exclusive criterion of truth. Bhaskar's consideration of the philosophies of science and social science resulted in the development of Critical Realism, a philosophical approach that defends the critical and emancipatory potential of scientific and philosophical enquiry against both positivist, and postmodernism challenges (Bhaskar, 1989). Critical realism emphasizes the importance of distinguishing between epistemological and ontological questions and the significance of objectivity properly understood for a critical project. The

assumptions of the positivist world view have been crushed without being able to resolve the phenomenon of discontinuity with the seemingly progressive, cumulative character of scientific development capable of growth and change (Bhaskar, 1989).

3. Principles of Critical Realism

Bhaskar's view of reality lies in the following principles: (Bhaskar, 1989)

- Social systems are intrinsically opened and cannot be artificially closed; hence, empiric testing of theories cannot be predictive and must be exclusively explanatory.
- Social theory and social reality are causally interdependent meaning that social theory is non-neutral being affected by and caused by values and actions. Because of this the standard fact/value and theory/practice distinctions break down.

According to Bhaskar (1978), "Science is the systematic attempt to express in thought, the structures and ways of acting of things that exist and act independently of thought". Roy Bhaskar discovered this philosophy of science in response to what he describes as the "air of paradox" which is based on the conflicting ways in which sociology is approached as a result of the Enlightenment (Williams, 2003). According to Bhaskar (1978), the things exist and act independently of our descriptions, but it is only through particular descriptions that we can comprehend them. Critical realists do not deny the reality of events and discourses, on the contrary, they insist upon them (Bhaskar, 1989). Hence, critical realism embraces practical and theoretical practices of social science that recognized these structures external to the observable phenomenon.

Critical realism is the combination of transcendental realism and critical naturalism as it involves the reception of epistemic relativity, meaning all beliefs are socially shaped, so that all knowledge is transitory, and neither truth values nor criteria of rationality subsist outside historical time (Bhaskar, 1989). Realists present the anti-positivist outlook of science where the quantitative research methodologies or causal explanations are valued over the qualitative approaches and are employed to get insight about the social context which can only be accessed through description of the phenomenon (Delanty, 1997). The basic principle of realist philosophy of science is that perceptions give us access to things and experimental activity gives access to structures that exist independently of us (Bhaskar, 1975).

Delanty (1997) has described that critical realism combines the three principles within a philosophy of social science. Firstly, the causal explanations is attainable; secondly, the social reality is largely an interpretative reality by social actors and finally, social actors evaluate their social reality. Critical realism as a philosophy of science rejects the monistic theory of scientific development and its deductive theory of scientific structure (Wikgren, 2005). Therefore, with the help of this new philosophy of science, there is an opportunity to discuss about the possibility of finding truth and debating the opposing philosophies in the science wars.

4. Theoretical Perspective

According to McEvoy & Richards (2006), in the view of critical realists, the definitive aim of research is to widen deeper levels of explanation and understanding rather than to identify only generalisable laws or the lived experience. In fact, it is deeper levels of understanding and knowledge gained through adapting all methods of exploration that confers critical realism for its usefulness and philosophical fortitude. In order to generate deeper levels of understanding, the principles of critical realism can be defined into the three domains: the real, the actual and the empirical. The real or 'deep' domain is used to produce an effect on a social situation. The actual domain supports to those events that occur but may not be experienced and implements high support in practice. The empirical are those aspects of reality that can be experienced directly or indirectly, Through a process called 'retroduction', the logic that emphasizes the phenomenon is gained by moving through observations and lived experience to hypothesize about the underlying structures and mechanisms (Wilson & McCormack, 2006).

According to critical realists, the best explanations are those that are identified as having the greatest explanatory power; hence, methods of inquiry are dictated by the nature of the research questions (McEvoy & Richards, 2006). Quantitative methods may be used to develop reliable descriptions and reliable comparisons, patterns and associations, to validate the causal explanations in proposed models. Qualitative methods help elucidate complex patterns that would otherwise be lost to quantitative methods.

According to Wilson & McCormack (2006), a purely positivist approach will not be able to capture most of the unobservable, non-measurable and unexplainable concepts related to practice component; on the contrary, critical realism would be able to acknowledge the role of study context and will recognize the complexity of social situations. Critical realism asserts an emancipatory nature of knowledge meant to free society from the modification of earlier structures of science. Science as emancipatory is defined in two ways; firstly science liberates people from erroneous beliefs and secondly scientific knowledge provides a basis for freeing people from oppressive social arrangements (Hammersley, 2002).

Bhaskar's claim about critical realism a philosophical foundation for the betterment of the mankind through a discussion that embraces observation of phenomenon through empiric methods and the inductive exploration of the social structures that define those observations is in consensus with the traditional perspective of the early modernists during the Enlightenment. The Enlightenment was the "secular reformation of the truth will set you free" through the questioning of all beliefs particularly those shrouded in religious dogma (Hammersley, 2002). On the contrary, constructivism relies on the multiple layers of interpretation of social actors in identifying the meaning of reality and truth (Wilson & McCormack, 2006). Critical realism is explicatory strong and forms the basis of theoretical underpinnings of realistic evaluation as it determines the causal explanations and identifies the intricate mechanisms and conditions that encircle them.

So how can the critical realism as the foundational philosophy reinforce the development and pursuit of nursing theoretical and clinical knowledge? Critical realism can confer several benefits to nursing knowledge development in many ways. It can establish the

collaborative environment and multidisciplinary partnership in nursing science, theory development and knowledge transfer. In addition, critical realism can provide a framework to guide appropriate action in practice development and realistic evaluation. Moreover, it can reduce the prominent place that post positivistic knowledge has within current nursing practice by embracing the true meaning of evidence based practice. Critical realism is also effective in understanding the complex context of the nursing world, improving nursing interventions and explicating biopsychosocial pathways as suggested by Clark, Lissel, and Davis (2008).

Critical realism is a viable option for nursing science because of its ability to explore observations within known theory and within the social structures of healthcare (Wainwright, 1997 & McEvoy, 2003). According to Wilson & McCormack 2006, positivist view of causal explanation is blemished as it fails to account for non-observable entities that actually provides a comprehensive view of occurrences of events, Whall and Hicks (2002), identify that neither positivism nor postmodernism is a panacea for scientific truth or consensus given the multifaceted, complex, and dynamic phenomena with which nurses deal in practice, education and research. Reed (2006) discusses that acknowledging a critical realism philosophy for nursing knowledge development would create a firm bond between nursing and science. "The current minority of knowledge producers, mostly doctorally prepared nurses, alone cannot provide adequate theory-based knowledge needed by all professional nurses to achieve full jurisdiction over practice". Moving beyond the postmodern would craft an opening for many epistemological and ontological ideas in nursing science.

Reed (2006) highlights the six tenets of critical realism. The tenets of neomodernism or critical realism reflect a philosophy of science that is aggressively occupied within the clinical component. These tenets posit the following epistemological and ontologic ideas: The first tenet is a latest view of the notion of empiricism that requires the use of innovative tools, methodology and technologies to rationalize knowledge production. This will lead to the utilization of arts, poetry, subjective methods and empirical based tools and employing more of the mixed methods in nursing research. The second tenet of critical realism is regarding the use of a new epistemology that will aid to educate all the health care professionals about the use of all the ways of knowing in nursing. The third tenet of critical realism refers to acknowledging an underlying pattern, a capacity for self-organization, agency, humanism, spirituality and potential for empowerment. By employing this tenet, there will be possibilities of embracing theory development based on ethics of caring and dedication. Unlike modernism, neomodernism doesn't detach itself from humanistic approach and allows for more diverse range of human experiences for building theory about caring for human beings during disease process.

The next tenet is about valuing for the difference and for continuing analysis of oppression. Neomodernism contributes to the views of feminist epistemology and critical theory in promoting the pursuit of knowledge that maximize potential for egalitarianism and independence from oppression. Critical realism has an emancipatory nature by definition which releases individuals from invalid beliefs and makes a basis for invigorating people from oppressive social arrangements. Such mandates of critical realism are in conformity with critical theory perspective. The fifth tenet of critical realism addresses the assumption of universal/shared principles as well as individual uniqueness and local truths. Critical realism puts the high value upon the assumptions of shared principles as well as individual uniqueness and local truths (Reed, 2006). This allows for the access of diverse models of explanation of phenomenon into the nursing practice and thereby; accepting the various interpretations of nurses' role and image in society. This concept of recognition of universal principles, shared truths and individual interpretation also create a philosophical foundation that captures evidenced based patient-centered care. The last tenet of critical realism approach addresses about an ongoing appraisal that leads to open, dynamic and contextually relevant meta-narratives, theories and philosophies. There is a re-enchantment of nursing science, where the metaphysical concepts matters, but it is equated by a critical awareness of history, context, and freedom for the knowledge generation.

Critical realism provides the philosophical foundation for critical social sciences and its espousal as a philosophy of science in nursing is a big question. Critical realism poses limitations when there is contradictory data in mixed research methodologies and it is confined with putting forward suggestions on how to deal with methodological problems in research (Rolfe, 2006). Scientific theory is not only a type of thinking illustrated by Newton, who transformed natural philosophy into modern science. Scientific theory is a process by which clinicians and patients participate in the co-production of knowledge. According to critical realists, clinicians need to be educated in how to employ various patterns of knowing for the generation of science theories of nursing in practice. Nurse need to place their theoretical knowledge in the context of concrete experience. Knowledge production in nursing will be more valuable when both the nursing and the scientific knowledge are considered synergistic and imperative in building disciplinary knowledge.

According to Wainwright (1997), critical realism was developing concomitantly and in response to postmodernist ontologies; however, it has not yet gained popularity as it has been highlighted in most of the nursing literature. CR as philosophy of science has not been accepted as a philosophical foundation of science because of the dissatisfaction with modernism philosophical underpinning and the enduring impact of positivist scientific tradition for many centuries. Nursing is now recognizing from an epistemological perspective, the need for a guiding philosophy of science that supports communication and a broader sense of truth. The steady movement toward mixed research methods, triangulation a critical analysis of evidence based nursing will facilitate critical realism for wider expansion and acceptance in nursing profession. It is hoped that discussion of critical realism will act as a stimulus for reviving the position of critical realism as a philosophy of science in nursing. I strongly believe that these possibilities of open discourse in mixed methods research and theory development espousing the epistemological methods will suggest an emancipatory progression of nursing science that will be valuable for patients, families, nurses and overall health care structures.

5. Implications for Healthcare Organizations

Critical realism has certain implications upon the health care organization and specifically on the nursing profession. It will aid health care organization to modify their health practices, policies and protocols. It will also exert on researchers and scientists as it will impact upon their belief system related to nursing theories, practice and research. Finally, it will help professionals to consider multidisciplinary and collaborative partnership across the various disciplines. These changes will take place gradually as it involves the changing their value belief system and modification of health care systems and agencies in general.

6. Conclusion

Deliberations of science and the pursuit of knowledge are bewildering to disentangle. Most of the time, they are sheltered by the biases of philosophers asserting to be experts and arguing to support or contradict a particular stance. The similar trends of discourse also exist in the discipline of nursing. Critical realism is a philosophically strong and potentially functional for nursing research. There seems to be a fundamental evaluation or a sense of struggle to accomplish for defining knowledge of science and then engaging in an inquiry process that impersonates the quality and credibility of the scientific method in nursing. In the early ages, nursing followed the trends of the dominant positivist paradigm; however, in the last couples of years, we have moved a step forward towards plurality and consideration for diversity rather than adopting a singular approach. In this paper, I have intended to explore Roy Bhaskar's interpretation of critical realism as a philosophy of science in nursing who has suggested that the ontology of this philosophy best supports the foundations of continued and progressive development of nursing knowledge. The history of nursing knowledge development, the major tenets of critical realism, their interpretation as 'neomodernism' in nursing and the implications for the progression of nursing knowledge have been outlined in an effort to propose further dialogue on this promising philosophy of science. It is very critical to consider that how can we bring the meaning and the ways of knowing to the applied world of nursing science when it comes to the articulation of the philosophical underpinnings.

In the nutshell, it is believed that nursing has come a way forward from the era of the positivism paradigm. The discipline is now heavily indulged in the quest of new knowledge through quantitative and qualitative research inquiries. It is also envisioned that this is a way forward to discover the truth and reality foundational to the science of nursing and will continue to contribute towards the scientific community. It is hoped that the discipline of nursing will continue to utilize critical realism as a foundational support for the development and the quest of nursing knowledge yet there are still more arguments surrounding critical realism that needs to be questioned and addressed. Hence, the search of critical realism in nursing will continue to progress.

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