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FUNDAMENTAL CARE AND KNOWLEDGE INTERESTS: IMPLICATIONS FOR NURSING SCIENCE.

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ABSTRACT

Aims and objectives. The aim of this discursive paper was to characterize the intra-theoretical interests of knowledge in nursing science as an epistemological framework for fundamental care.

Background. For Jürgen Habermas, theory does not separate knowledge interests from life. All knowledge, understanding and human research is always interested. Habermas formulated the knowledge interests in empirical-analytical, historical-hermeneutic and critical social sciences; but said nothing about health sciences and nursing science.

Design. Discursive paper.

Results. The paper is organised into five sections that develop our argument about the implications of the Habermasian intra-theoretical interests in nursing science and fundamental care: the persistence of a technical interest, the predominance of a practical interest, the importance of an emancipatory interest, “being there” to understand individuals’ experience and an “existential crisis” that uncovers the individual’s subjectivity.

Conclusions. The nursing discipline can take on practical and emancipatory interests (together with a technical interest) as its fundamental knowledge interests. Nurses’ privileged position in the delivery of fundamental care gives them the opportunity to gain a deep understanding of the patient’s experience and illness process through physical contact and empathic communication.

Relevance to clinical practice and nursing research. In clinical, academic and research environments, nurses should highlight the importance of fundamental care, showcasing the value of practical and emancipatory knowledge. This process could help to improve nursing science’s leadership, social visibility and idiosyncrasy.

Key words: fundamental care, nursing science, Habermas, clinical practice.

What does this paper contribute to the wider global clinical community?

- In clinical environments, the provision of fundamental care gives nurses the opportunity to gain a deep understanding of the phenomena related to the illness process as well as the patients' and relatives' experiences.
- Practical and emancipatory interests (together with technical interest) could guide fundamental care and research programs for nurses.
- Characterising knowledge interests of fundamental care can help nurses to interact as autonomous and equal partners in the interprofessional clinical team.

INTRODUCTION

Health sciences are defined by a set of knowledge, whose object of study is the recuperation or maintenance of human health and the prevention, diagnosis and treatment of illness, together with patient care (Granero-Molina *et al.* 2015). Currently, they encompass knowledge disciplines such as medicine, pharmacology, physiotherapy or nursing. Although their historical evolution has seen various different stages, in the current clinical and research panoramas, most health sciences understand knowledge as the generation of theory through observation and experimentation (Karnick 2013). Their fundamental objective aims to explain regular relationships between phenomena for prediction (Gustin 2011). Therefore, empirical analytical methodologies, scientific evidence and standardization processes take precedence. But in specific illness context, the reality goes beyond what theory can explain and what is statistically significant is not always clinically relevant (Fawcett 2015). The result of this is the generation of theoretical knowledge that focuses on the unchangeable rather than on what is born, changes and dies (Granero-Molina *et al.* 2015). This concept of theory marginalizes individuals' experiences and means accepting the difficulty of a holistic vision of human health. However, for authors like Jürgen Habermas, the type of knowledge achieved depends on the interests that guide the processes to access it (Habermas, 2005).

In nursing science, several valuable aspects of the nursing process cannot be captured as theoretical knowledge. Nursing science lies between social sciences and health sciences; therefore, nursing research and clinical practice cannot be sustained if they are exclusively supported by scientific-technical rationality (Gustin 2011). A large part of nursing science seems to have uncritically accepted the use of probability values as a gold standard approach for evaluating the validity of scientific evidence and the legitimacy of one's actions and care (Ou *et*

al. 2017). However, although nurses are responsible for fundamental care and are obliged to contribute to its theoretical and practical development (Keogh & Osborne 2014), it is still not a priority. Habermas' philosophy can help to redefine nursing activities (such as fundamental care) that are not recognized because they cannot be captured as knowledge using technoscience.

Fundamental care is a set of care efforts that each person requires, regardless of their clinical condition or health environment, which are focused on improving their well-being, reducing damage and optimising their recovery (Kitson *et al.* 2013). Fundamental care encompasses numerous key aspects of nursing care such as communication, nutrition, pain management or hygiene (NHS 2010), and it is believed to improve patients' safety, recovery and overall experience (Feo *et al.* 2017). The Fundamentals of Care Framework (Kitson *et al.* 2013) suggests that three important dimensions are required for the delivery of person-centred fundamental care: a positive and trusting nurse-patient relationship, to satisfy patients' different fundamental care needs and a care context that is supportive of these core tasks. The Fundamentals of Care Practice Process enables nurses to apply the Fundamentals of Care Framework to patient care in five stages: identifying concepts, form a working hypothesis, consider the information in the Fundamentals of Care Framework, consider the relevant theories and collate the information to undertake the clinical-reasoning process (Conroy *et al.* 2016). However, patients have particular circumstances that are unique and that affect their diagnosis, treatment, recovery and nursing care. Fundamental care is often devalued to basic (non-complex) competency (Carter 2016) and its clinical impact is overlooked (Kitson & Macmillan 2016). Philosophical and pragmatic frameworks are needed in order to ensure that patients' physical, psychosocial and relational needs are embedded into nursing practice, research and epistemological development (Kitson *et al.* 2014). Habermas' philosophy can contribute to articulate and clarify the problem in fundamental care. Jürgen Habermas (Habermas 2010) conceptualises contemporary society in two spheres: the system, mediated by instrumental rationality (success, utility and benefit oriented); and the life-world, mediated by communicative rationality (oriented towards mutual understanding). Diverse types of rationality, action and interests converge in fundamental care, which requires a set of knowledge that brings together empirical, ethical and interpersonal dimensions. The Habermasian theory (Habermas 2005) could help link the knowledge interests of nursing science with fundamental care, and can contribute to clarify the theoretical, practical and research nursing position.

BACKGROUND

As opposed to the positivist philosophy of science, Habermas' philosophy rejects the colonisation of the life-world by the system world (Habermas 2005); warning that all knowledge is not pure and disinterested. Any knowledge is always governed by a technical intra-theoretical interest (customary of positivism), practical or emancipatory. This paper expands this idea in relation to nursing science and fundamental care in a line of argument which will be exposed in five points: (1) technical interest (predictive and oriented to the action) persists in fundamental care but it is insufficient because it cannot fully guide and explain the generation of nursing knowledge; (2) practical interest (oriented towards understanding) is predominant in fundamental care, an ideal setting for comprehensive knowledge where nursing can stand out over other sciences; (3) the emancipatory interest (oriented to autonomy and responsibility in care) is important in fundamental care; (4) being there (the closeness of the nurse in fundamental care); and (5) existential crisis (presence of the nurse in processes of birth, pain, death...) are opportunities to discover individual subjectivity, and source of knowledge for nursing research and science.

Scientific knowledge is built upon theories, which guide practice through the link with the positivist paradigm and empirical-analytical methodology (Fawcett & DeSanto-Madeya 2013). The paradigm concept includes a set of practices and knowledge that defines a scientific discipline, its objectives, methodologies and interpretation of results. Currently, positivism dominates the epistemological framework in the natural sciences, with its influence spreading to social sciences and health sciences (Habermas 2009). The positivism is based on the concepts of theory (scientific knowledge), instrumental rationality (which plans objectives for specific purposes) and system (which alludes to common patterns of action that serve the interests of institutions and organisations). But compared to the system, phenomenology conceives "life-world" as a common interpretive horizon of individuals that includes family, cultural and social life within a framework of shared meanings (Habermas, 2010). The positivist paradigm helps to establish an epistemological framework for biomedicine or pharmacology, but there is not clear for humanistic medicine or nursing (Risjord 2010). In nursing, authors such as K  rouac *et al.* (1996) defined the nursing paradigms of categorisation, integration and transformation; and Carper (1978) defined the fundamental patterns of knowing as empirical, aesthetic, personal and ethical.

Fundamental care is based on both biological data and the meanings given by the patient. However, little progress has been made in generating multidimensional knowledge. There are several reasons for this: the system focuses results on the cure by forgetting

psychosocial and relational elements and nurses focus on physical and objectively measurable issues perceiving experiences as abstract (Feo & Kitson 2016). Nurses give more prestige to technical activities than to fundamental care, which lacks scientific evidence, records and institutional support (Scott *et al.*, 2005). Moreover, according to Habermas's philosophy, nurses do not focus their interest in knowledge and research on "non-theoretical" aspects of fundamental care (eating is not only nurturing, but a matter of dignity, respect and compassion). The positivist concept of theory was much discussed by authors of the Frankfurt School (Horkheimer 2003) and reformulated by Habermas, who combined description, valuation and orientation, introducing a hermeneutic dimension. For Habermas, theory does not separate knowledge interests from life, but is in fact mediated by them. All knowledge, understanding and human research is always "interested" or responsive (Habermas, 2005). The search for knowledge is always driven by some kind of purpose. From knowledge extra-theoretical interests of a personal, professional, political and ideological nature emerge (Koelewijn *et al.* 2014), which influence clinical decisions, objectives, policies and/or funding of research. There are also intra-theoretical interests, specific to each knowledge discipline, which define its object of study, research methods and ways of doing science. Habermas formulated a connection between logical-methodological rules and knowledge interests in empirical-analytical, historical-hermeneutic and critical social sciences (Habermas 2005). In the empirical-analytical sciences approach (experimental, physical and natural sciences), a "technical interest" dominates; means-end rational action characterizes research focused on prediction and technical action (Taylor 2004). In the historical-hermeneutic sciences approach (history, economy, law...), a "practical interest" considers phenomena and experiences within an inter-subjective context (Habermas 2010). Practical interest involves communicative action and must be cognizant of the existence of perspectives other than their own (Walker & Lovat 2016). In the critical social sciences approach (philosophy, sociology, politics, feminism...) an "emancipatory interest" takes precedence, focused on safeguarding human freedom, self-reflection, autonomy and dignity (Habermas 2005).

However, Habermas says nothing about the health sciences, where the predominance of interests characterizes the theoretical grounding and methodological approach of the knowledge disciplines (Granero-Molina *et al.* 2015). Medicine and biomedicine, guided by an eminently technical knowledge interest, play a prominent role in research and progress in the health sciences (Risjord 2010). Practical and emancipatory interests are present in medical science, but technical interest is prioritized. Regarding nursing science, the question is: what are the intra-theoretical interests of knowledge in nursing science? This question is important to know both what the norms for nursing science in relation to a science of fundamental care

should be, and what the philosophy of science for fundamental care should be. It can also help to highlight the value of a different way of generating knowledge that nurses already develop.

The aim of this discursive paper was to characterize the intra-theoretical interests of knowledge in nursing science as an epistemological framework for fundamental care. This paper provides a theoretical discussion on the application of Habermas's interest theory to fundamental care in nursing. Our starting point begins with the question "Is fundamental care a source of represented knowledge according to interests in nursing science? Literature about Habermasian knowledge interests, nursing science and fundamental care were examined. Reviewing the literature has allowed us to argue the Habermasian knowledge interests in health sciences in general and nursing science in particular. A contextual understanding and discussion of key concepts that support the connection between fundamental care, knowledge interests and nursing science is provided. The paper is organized into six sections, discussion and a conclusion, as follows:

The persistence of technical interest in nursing science and fundamental care.

Consolidation of the positivist paradigm and instrumental rationality in the health sciences leads to medicine capitalizing on its objectives, methodologies and interests. Initially, the nursing discipline adopts the same paradigm and similar interests (Houghton *et al.* 2012). In clinical nursing practice, questions that require empirical-analytical research emerge together with problems that require a technical action response. When nurses collaborate in the interdisciplinary team they have to base their actions on scientific evidence (Areskoug *et al.* 2012). A clear example of the presence of a technical interest in fundamental care could be patient hygiene. When nurses see to the hygiene of the bedridden patient, they should have knowledge about skin assessment and scientific evidence that supports the use of products to keep the skin hydrated (moisturizing oils, creams, etc.). In this situation, nurses need to have access to robust scientific evidence in order to implement the most effective interventions. For nursing science, practice based on evidence, mediated by a technical interest, is necessary but not sufficient. Fundamental care requires a set of knowledge that brings together empirical, ethical and inter-personal dimensions (McCrae 2012).

The predominance of practical interest in nursing science and fundamental care.

Fundamental care requires a knowledge inaccessible from the technical interest but accessible from the practical interest. Practical knowledge (not capitalized on by medicine, biology or pharmacology), more than breaking down a phenomenon for analysis, is interested in the care of the human being as a whole. During fundamental care, the patient's world opens up to the nurse, allowing them to access hidden knowledge, through understanding. Faced with measurement and control (technical knowledge), understanding is accessing the life-world of another person through ours. It is a commitment to truth through dialogue that requires time, intimacy, recognising vulnerability and giving importance to questions, comments, arguments and concerns. Fundamental care promotes a meeting where two subjects (nurse-patient) endowed with corporeality and language, engage in a relationship driven by meanings in that context. Both parties expose what they are (knowledge, experiences, ideas, and other personal feelings), allowing "something new" to emerge, a knowledge that remained hidden (Dahlberg & Dahlberg 2004). When nurses assist with eating and drinking, hygiene, or elimination, they have an opportunity to comprehend, and develop shared plans of action in accordance with the individuals' points of view (Walker & Lovat 2016). For example, concerning hygiene, together with the water temperature, type of soap or postures according to the pathology (technical interest), what matters is the patient's experience during the process, what it means for them and for their own life. Comprehension encompasses identifying shame, preserving their image, maintaining respect or exploring comfort and relaxation. But in addition, through the closeness and interactions of fundamental care, nurses share a condition of vulnerability that allows the emergence of hopes, beliefs or fears regarding the illness and life. Practical knowledge helps us to formulate and answer questions such as *what does the patient's, relative's or professional's individual experience add to the research problem? What deep knowledge of the phenomenon's essence can I access? What are the experiences that may help me to interpret what the patient situation is so that I can look after him better?* Understanding the peculiarities of a phenomenon has already demonstrated its usefulness in the generation of knowledge and in the evaluation of interventions (Thirsk & Clark, 2017). It is also an appropriate approach to study fundamental care. Nurses are expert professional partners for patients and relatives, bringing together scientific, practical and moral aspects (Dierckx de Casterlé, 2015), which is why they should undertake their research guided by practical interest.

The importance of emancipatory interest in nursing science and fundamental care.

If there is a professional who can assume the emancipatory interest of knowledge in fundamental care it is the nurse. Therefore, this interest must be of crucial importance in research. Habermas states that there are processes guided by a human interest in freeing oneself from coercions; but it implies becoming aware in such a way that the person assumes their ability to act autonomously (Habermas 2005). Together with understanding, the objective of communicative action is to reach an unforced consensus regarding what to do (Habermas, 2010), emphasising “with” instead of “for” patients (Taylor 2004). Nurses can implement fundamental care by promoting autonomy in patients’ (Feo & Kitson 2016), making them participants in the self-care and decision-making processes. The nurse educates the patient to choose healthy behaviours, or has knowledge about treatments and/or their side effects. To investigate how the patient assumes his or her responsibility or how to educate them for decision making, is governed by emancipative interest. Such research may focus on understanding a phenomenon (eg, difficulties in changing inappropriate health behaviours); or to compare interventions (for example, the effectiveness of two educational techniques in completing advanced directives), but in both cases it is nursing research governed by an emancipatory interest.

With regards to fundamental care, the patient’s process of self-reflection regarding the importance of hygiene for their well-being, dignity, as a sleep facilitator and/or prevention of skin lesions can help their involvement in self-care and promote their autonomy. If a nurse helps patients to make conscious decisions about the importance of self-care (bathing/hygiene), it contributes to generate a willingness to change in the patient in order to become involved in their own health. There are people with a deficit of self-care (in hygiene, for example) due to lack of motivation, considerable physical difficulties or lack of ability in the management of means of help. Investigating barriers/facilitators for the patient's involvement in bathing/hygiene, their education, motivation strategies, experiences or development of support devices, is governed by emancipative interest.

“Being there” to understand the individual’s experience.

Nursing and caring are connected with the life-world, but practised in the system world (Scheel *et al.* 2008). Fundamental care requires closeness and corporeality, a relationship is founded on “being there emotionally and being there physically”, allowing the most intimate and personal to be accessed (Dierckx de Casterlé, 2015). Through

intersubjectivity which implies fundamental care, both patient and nurse live together with the pain (Jangland *et al*, 2016), incapacity and proximity of death; a unique and specific biographical coordinates which create a shared framework of meanings (Habermas 2009). From a concept of bodily intersubjectivity (carnal, in terms of Merleau-Ponty philosophy), nurses try to grasp the patient's needs, conflicts, hopes and desires, a knowledge which allows us to get close to the life-world. Fundamental care implies "being there" physically, taking part in the uncertainty of "being or existing" alongside the patient, who is a subject with us (Alligood 2014). This position allows the nurse to understand another existence (private and carnal), with motives, desires and circumstances of their own. Describing human existence and developing methodologies that allow access to life-world is complex (Lindberg *et al*. 2016), but "being there" is an opportunity for nurses. Nurses show a more active interest in the patients' everyday life (Walseth & Schei 2011), always "get close" and "show" themselves. For example, during the patient's hygiene, the nurse touches, explores and asks; collects physical data of the state of the skin, looks and communicates with the patient as a whole. This bodily and linguistically mediated approach to a patient who has shown his or her outer (physical) nakedness facilitates his "inner" (experiential and moral) nudity in successive encounters. That "exposed interior" is an invaluable source of data when, in addition, is cared for with the eyes, the tools (knowledge, intention ...) and the objective of investigating.

An "existential crisis" that uncovers the individual's subjectivity.

The nurse-patient relationship established through fundamental care has existential implications, which can only be accessed from a practical and emancipatory interest. During fundamental care the nurse deals with physical, but also social and cultural barriers; fear, suffering, pain and death are all underlying issues in the loss of health. Illness leads not only to a physiological crisis, but also to an existential one, in which patients become aware of themselves, their vulnerability and their finite nature. In this context, nursing practice implies making an ethical commitment to the sufferer from a perspective of compassion, autonomy and consensus (Wilson *et al*. 2014; Walker & Lovat 2016). Day after day, hour after hour, the illness entails an existential crisis that uncovers an individual's subjectivity to which the nurse has access (Carper, 1978). When providing fundamental care, the nurse communicates with patients within the intimacy, meeting their needs, bathing them, dressing them (Green 2013), and accessing the hidden and personal sides that the existential crisis uncovers. For example, in fundamental care at the end of life, while eating or during personal hygiene a

nurse can access the patient's narrative. In the presence of death, the presence and active listening allows the nurse to explore the experiences, needs or decision making, knowledge that is a source of research.

DISCUSSION

Nursing science is situated in a dynamic field between natural, human and social sciences (Scheel *et al.* 2008). Defining its knowledge interests would help to clarify its epistemological positioning and practices (Khushf 2013, Granero-Molina *et al.* 2015). In addition, there is also a need for frameworks that incorporate patients' basic needs into nursing reflection, clinical practice and research (Kitson *et al.* 2014). The Habermasian theory of intra-theoretical knowledge interests has allowed us to characterize it in nursing science and fundamental care. Similar to natural sciences (Habermas 2005), the health sciences and nursing science can formulate empirically verifiable hypotheses, which allow predictions to be made, and look for regularities, which are formulated by way of laws (Cruickshank 2012). However, while some research indicates that the scientific evidence for healthcare is not used sufficiently as a base for decisions in daily practice (Areskoug *et al.* 2012); postpositivism opts for going beyond empirical regularities (Cruickshank 2012). Even though empirical evidence in nursing research continues to grow, its application in clinical practice has been limited (Feo *et al.* 2017).

The Habermasian division of social reality helps to examine the effects of tension between the system and people's life-world (Krzysztof & Wojciech, 2017). Although, from a practical and emancipatory interest some studies inform us about the evaluation of interventions (Thirsk & Clark, 2017), the life-world of patients is not prioritized or not on healthcare professionals' agenda at all (Walseth & Schei, 2011).

Fundamental care can be a magnificent opportunity for nurses to get close to that knowledge, but they need to become aware of the intra-theoretical interests of their discipline (Habermas, 2009). Nurses themselves see fundamental care as a minor and physical task for which they do not have time, delegating it to other professionals (Kitson & MacMillan 2016). However, when the interest is to comprehend (Dierckx de Casterlé, 2015), fundamental care grants nurses a privileged position to access knowledge. From a practical and emancipatory knowledge interests, nurses should incorporate phenomena related to health and illness as a main object of study (Taylor 2004); a positioning with profound epistemological implications.

Fundamental care is an activity which is highly valued by patients (Jangland 2016), but it needs greater clinical and research commitment by professionals (Feo & Kitson 2016). Fundamental care allows nurses to interact with others (Ray & Turkel 2014), take into consideration their circumstances and preferences (Walseth & Schei 2011), and uncover their life-world. Because of this, together with technical interest (Feo & Kitson 2016), a conscious and openly-stated commitment of nurses is required by the practical and emancipatory interests in fundamental care research (Wilson *et al.* 2014). To contribute to the improvement of nursing science and of healthcare provision (Flynn *et al.* (2017), nurses need to strengthen their philosophical, theoretical and ethical positioning. To interact as equal partners in the healthcare teams (Wilson *et al.* 2014), nursing needs to establish itself as an autonomous profession and knowledge. Fundamental care poses a challenge to nurses (Feo *et al.* 2017), and this influences not only the educational programs (Carter 2016), but also research programs and the application of knowledge into practice (Kitson *et al.* 2014). Additionally, it represents a unique opportunity to generate their own knowledge, complementary to the rest of the health sciences. Nurses would thus be responsible for developing and fostering research which, based on practical and emancipatory interests, would increase theoretical development and contribute to highlight the relevance of nursing science in the health sciences framework. In this regard, fundamental care offers a well-positioned platform in which nursing practitioners, academics, researchers and leaders could interact and set the grounds of nursing science (Kitson & Macmillan 2016). But above all, as in any social process, it would require a clear commitment at all levels of nursing in favour of its consolidation.

CONCLUSIONS

Identifying what theory is and how nursing as a discipline defines it, is of concern. J. Habermas' theory of knowledge interests has allowed us to define the intra-theoretical interests in the nursing discipline. In nursing science, while a technical interest remains evident, practical and emancipatory interests take precedence. These interests have profound implications in the way nurses reason, understand and apply their knowledge with regard to their object of study, research methods and development of theory. Fundamental care is a professional responsibility and a study object. The practical and emancipatory interests (and to a lesser extent the technical interest) could direct nursing research and practice on fundamental care. This is a unique opportunity, beyond theoretical knowledge, to incorporate the life-world of the patient, for which the nurses should be responsible, to the investigation. This position allows experiences

regarding the health-illness process to be better understood, involve the patient in decision-making and contribute to the development of a nursing epistemology.

RELEVANCE TO CLINICAL PRACTICE AND NURSING RESEARCH

Research in the health sciences requires the integration of natural, social and human sciences; knowledge guided by the intra-theoretical interests of each of the disciplines which comprise them. The true test of nursing is in its knowledge, but the lack of consensus about what the intra-theoretical nursing interests are, proves daunting when disseminating nursing science to nurses and other disciplines of health sciences. Although important work has been done in the development of knowledge and nursing research from non-positivist approaches, the Habermas theory of knowledge interests can contribute to this goal. Practical and emancipatory interests (together with technical interest) could guide an own research program for nurses. In increasingly technological environments, fundamental care is often devalued and invisible. In clinical, academic and research environments, nurses should highlight the importance of fundamental care, showcasing the value of practical and emancipatory knowledge. Our paper can be interpreted as a call for action. Nursing science needs to develop the philosophy of science that would allow its research to be conducted and its knowledge products validated and disseminated. This process could help to improve nursing science's leadership, social visibility and idiosyncrasy.

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REFERENCES

- Alligood MR (2014) *Areas for further development of theory-based nursing practice*. In *Nursing theory. Utilization and application*. (Alligood MR ed.), Elsevier, St. Louis, USA pp. 417-27.
- Areskoug K, Kammerlind AS & Levander SM (2012) Evidence-based practice in a multiprofessional context. *International Journal of Evidence-Based Healthcare* **10**, 117–125.
- Carper B (1978) Fundamental patterns of knowing in nursing. *Advanced Nursing Science* **1**, 13-23.
- Carter P (2016) Education is needed to ensure high quality, fundamental care. *Nursing Standard* **30**, 33.

Conroy T, Feo R, Alderman J *et al.* (2016) Building nursing practice: the Fundamentals of Care Framework. In *Potter and Perry's Fundamentals of Nursing* (Crisp J, Douglas C, Rebeiro C *et al* (Eds). Elsevier Australia, Chatswood, pp. 15-28).

Cruikshank J (2012) Positioning positivism, critical realism and social constructionism in the health sciences: a philosophical orientation. *Nursing Inquiry* **19**, 71–82.

Dahlberg KM & Dahlberg H (2004) Description vs. interpretation – a new understanding of an old dilemma in human science research. *Nursing Philosophy* **5**, 268–273.

Dierckx de Casterlé B (2015) Realising skilled companionship in nursing: a utopian idea or difficult challenge? *Journal of Clinical Nursing* **24**, 3327-3335.

Fawcett J & DeSanto-Madeya S (2013) *Contemporary nursing knowledge: analysis and evaluation of nursing models and theories*, 3rd ed. F. A. Davis Company, Philadelphia, USA, pp. 26-44.

Fawcett J (2015) Thoughts about theories and statistics. *Nursing Science Quarterly* **28**, 245-248.

Feo R & Kitson A (2016) Promoting patient-centred fundamental care in acute healthcare systems. *International Journal of Nursing Studies* **57**, 1-11.

Feo R, Conroy T, Marshall RJ, Rasmussen P, Wiechula R & Kitson AL (2017) Using holistic interpretive synthesis to create practice-relevant guidance for person-centred fundamental care delivered by nurses. *Nursing Inquiry* **24**, 1-11.

Flynn R, Scott DS, Rotter T & Hartfield D (2017) The potential for nurses to contribute to and lead improvement science in health care. *Journal of Advanced Nursing* **73**, 97-107.

Granero-Molina J, Fernández-Sola C, Muñoz JM & Aranda C (2015) Habermasian knowledge interests: epistemological implications for health sciences. *Nursing Philosophy* **16**, 77-86.

Green C (2013) Philosophic reflections on the meaning of touch in nurse–patient interactions. *Nursing Philosophy* **14**, 242–253.

Gustin LW (2011) Implications for theory – a challenge for researchers? *Scandinavian Journal of Caring Sciences* **25**, 417–418

Habermas J (2005) *Conocimiento e interés*. In: Habermas J. *Ciencia y técnica como ideología*. Tecnos, Madrid [in Spanish].

Habermas J (2009) *La lógica de las ciencias sociales*. Tecnos, Madrid [in Spanish].

Habermas J (2010) *Teoría de la acción comunicativa*. Trotta, Madrid [in Spanish].

Horkheimer M. (2003) *Teoría crítica*. Amorrortu, Madrid [in Spanish].

Houghton C, Hunter A & Meskell P (2012) Linking aims, paradigm and method in nursing research. *Nurse Researcher* **20**, 34-39.

Jangland E, Kitson A & Muntlin A (2016) Patients with acute abdominal pain describe their experiences of fundamental care across the acute care episode: a multi-stage qualitative case study. *Journal of Advanced Nursing* **72**, 791-801.

Karnick PM (2013) The importance of defining theory in nursing: is there a common denominator? *Nursing Science Quarterly* **26**, 29-30.

Keogh K & Osborne K (2014) Draft code puts personal onus on nurses to ensure fundamental care. *Nursing Standar* **28**, 9.

Kérouac S, Papin J, Ducharme F, Duquette A & Major F (1996) *El pensamiento enfermero*. Masson, Barcelona [in Spanish].

Khushf G (2013) A framework for understanding medical epistemologies. *Journal of Medical Philosophy* **38**, 461-486.

Kitson A, Conroy T, Kuluski K, Locock, L & Lyons, R (2013) *Reclaiming and redefining the fundamentals of care: nursing's response to meeting patients' basic human needs*. University of Adelaide, Adelaide.

Kitson AL, Muntlin A & Conroy T (2014) Anything but basic: nursing's challenge in meeting patients' fundamental care needs. *Journal of Nursing Scholarship* **46**, 331-339.

Kitson A & MacMillan K (2016) Introduction from the guest editors: perspectives on fundamental care. *Nursing leadership (Toronto, Ont.)* **29**, 6-9.

Koelewijn WT, Ehrenhard ML, Groen AJ & Van Harten WH (2014) Exploring personal interests of physicians in hospitals and specialty clinics. *Social Science & Medicine* **100**, 93-98.

Krzysztof P & Wojciech D (2017) Jürgen Habermas and the dilemmas of experience of disability. *Nursing Philosophy* **18**,4.

Lindberg E, Österberg SA & Hörberg U (2016) Methodological support for the further abstraction of and philosophical examination of empirical findings in the context of caring science. *International Journal of Qualitative Studies on Health and Well-Being* **26**, 1-9.

McCrae N (2012) Evidence-based practice: for better or worse. *International Journal of Nursing Studies* **49**, 1051-1053.

National Health System (NHS) 2010. Essence of Care 2010. Benchmarks for the fundamental aspects of care. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216691/dh_119978.pdf (accessed 10 January 2017)

Ou CH, Hall WA & Thorne SE (2017) Can nursing epistemology embrace p-values? *Nursing Philosophy*. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/nup.12173/epdf> (accessed 2 february 2017)

Ray MA & Turkel MC (2014) Caring as emancipatory nursing praxis: the theory of relational caring complexity. *Advanced Nursing Science* **37**, 137-146.

Risjord M (2010) *Nursing knowledge: science, practice and philosophy*. Wiley- Blackwell, Oxford.

Scheel ME, Pedersen BD & Rosenkrands V (2008) Interactional nursing- a practice-theory in the dynamic field between the natural, human and social sciences. *Scandinavian Journal Caring Science* **22**, 629-636.

Scott A, Butler M, Drennan J, Irving K, McNeela P & Hanrahan M (2005). Modes of rationality in nursing documentation: biology, biography and the "voice of nursing". *Nursing Inquiry* **12**, 66-77.

Taylor B (2004) Technical, practical, and emancipatory reflection for practicing holistically. *Journal of Holistic Nursing* **22**, 73-84.

Thirsk LM & Clark AM (2017) Using qualitative research for complex interventions: the contributions of hermeneutics. *International Journal of Qualitative Methods* **16**, 1-10.

Walker P & Lovat T (2016) Dialogic consensus in clinical decision-making. *Journal of Bioethical Inquiry* **13**, 571-580.

Walseth LT & Schei E (2011) Effecting change through dialogue: Habermas' theory of communicative action as a tool in medical lifestyle interventions. *Medicine Health Care and Philosophy* **14**, 81-90.

Wilson F, Ingleton C, Gott M & Gardiner C (2014) Autonomy and choice in palliative care: time for a new model? *Journal of Advanced Nursing* **70**, 1020-1029.