Abstract

Intuition is a quality that nurses have traditionally valued, but nowadays evidence-based research climate is often denigrated. Because it is difficult to investigate and quantify, intuition has tended to be seen as unreliable, unscientific and unsuitable for nursing practice. However, intuition, like caring, cannot be subjected to measurement and should not be overlooked as an important tool. Intuition is identified as a useful tool that needs to be recognized in nursing. At the same time, intuition is described as an important type of nursing knowledge and a valid way of knowing in clinical nursing practice. It is knowing something or deciding to do something without having a logical explanation. Intuition in practice has been linked to enhanced clinical judgment, effective decision making and crisis aversion. The inability to provide rationale for an action or decision makes intuition challenging for nurses to describe, explain or openly acknowledge. In the nursing literature, intuition is recognized as an important component of decision-making theories. In the literate outlines the two predominant theoretical approaches to decision making: the systematic positivistic approach and the intuitive humanistic approach. Both approaches are valuable and emphasise the need to investigate quantitatively the intuitive humanistic approach in decision making. To understand the intuitive approach to decision making, nurses need to first identify intuitive feelings and intuition use in their clinical practice. Qualitative studies demonstrate intuition use in expert decision making and label it as a source of knowledge coming from feelings, sensations and connections.

Intuition is a component of decision-making models applied in nursing practice. Empirical research which requires nurses to recognize intuition and utilize it effectively in nursing practice.

Keywords: Intuition, Theory, Profession, Decision making, Nursing, Nursing care.

Introduction

Although everything has a rational explanation in human life, people tend to explain everything with extraordinary powers. This began from the moment the human was born, people thought that the good or bad things they experienced were caused by extraordinary powers, and they identified the events that they described as good with the concept of award, and they identified the events that they described as bad with the concept of punishment [1,2]. When it is viewed from this aspect, it can be said that the concept of intuition is one of the reasons of the birth of nursing. Because the care that began along with the fact that the mother cares for her child, shows attention and affection for her child from the moment the human was born has constituted the essence of nursing, intuition has been used indirectly in all care practices since that time although it was based on folkloric practices in those times. Intuition has taken its place among the scientific foundations of nursing although it is an abstract concept within the historical development of nursing [3]. However today, the use of intuition in nursing has been a frequently discussed topic, and it is a term which has not yet completed its scientific information on how nursing uses intuition in decision-making process. In recent years, literature has also shown a tendency to the relationship between intuition, science, knowledge and the ways of knowing, it has been included in other professions outside of nursing, and the information on this subject has started to emerge slowly. Studies in the field of psychology have increased to better understand and explain the intuition and the foundations of intuition. It is suggested that this term is not based on a rational logic but is used to resort to a behavior [4].

Background

The Concept of Intuition

According to Turkish Language Institution (TDK), intuition is to estimate something that has happened or will happen without a clear proof or to directly understand a concept, generalization without performing test or reasoning [5]. Intuition is literally defined as “presence”, “visible”, “clear” and “insight” [6,7]. Merriam-Webster Online Dictionary describes it as the sense of guidance for the movement of the individual without understanding the exact cause of something [8]. Other defines are as a feeling of knowing that something terrible is happening, an immediate unconscious perception, direct understanding of truths,
independence of the analytical process, a nonlinear process of knowing through physical awareness, “emotional awareness” and “making connection between them”, and an irrational unconscious type of knowing. It has also been described as a “gut feeling” and with some negative connotations, such as “having a very bad feeling”, “feeling uncomfortable”, “feeling there was something terribly wrong”, “something missing”, or there was “something they had not done” [9,10]. To explain intuition just as a ‘foresight’ or the ‘sixth sense’ is insufficient to explain the real functions of the intuition. Intuition and the use of intuition in critical situations have been a matter of debate for many years, and this situation has made it difficult to understand the use of intuition in nursing [4,11-13].

Physiology of Intuition
In recent years, important experimental researches have been carried out concerning the physiology of intuition, and this issue has been an important research area [14]. In many studies, the concept of intuitive sense perception has been described as a function of the subconscious reaching forgotten and previous experiences, and individuals' access to information [15]. In scientific studies carried out, the findings obtained indicate that subcortical structures such as insular, cingulate, orbito-frontal cortices and basal ganglia have active roles in intuition [16]. The basal ganglia have important roles in information processing for intuition [17]. In the study of Horr et al. examining the role of the orbito-frontal cortex in intuitive decisions, the electromagnetic brain responses of the participants were recorded by magnetoencephalography (MEG) during a visual coherence judgment task. The activation of orbito-frontal cortex is independent of the features of the physical stimuli, task demands and the fact that participants explicitly recognize the stimuli. It is determined that the orbito-frontal cortex has been activated when participants perceive coherence [18]. Consequently, it has been determined that the orbito-frontal cortex has a key role in the early stages of intuitive judgment/decision-making. In the research carried out by McCarty et al. electrophysiological data showed that the heart is directly included in information processing against future emotional stimuli before the body encounters with the actual stimulus [15].

Firstly, heart responses to future emotional stimuli by reducing the heart rate. Researchers have concluded that there is a relationship between the heart and brain in the processing of prestimulus information. In the second stage of the study of the same researchers, they demonstrated that the heart receives the intuitive information prior to brain. The frontal cortex, temporal, occipital and parietal areas in the brain are included in the process of prestimulus information processing. In the same research, they also examined the relationship between intuition and sex. It was found that there was a significant correlation between the heart beat-evoked potentials of women and the cortical event-related potentials, and it was concluded that women’s hearts are more coherent in intuitive information processing [19]. It has also been stated in some studies that the mirror neurons in the brain are associated with intuition. It has been stated that it is important in developing empathy and patient-nurse interaction, and it can be used more actively by experience [20,21]. In addition to the physiology of intuition, the theories developed have contributed to the understanding of the importance of intuition in the decision-making process in nursing.

Intuition and Theories
Benner’s theory of expertise from novice and Damasio’s Somatic Marker Hypothesis are the most common and accepted two approaches related to making decisions based on intuition in nursing practices [22]. The intuition plays an important role in Benner’s theory of expertise in nursing. According to Benner, an expert nurse can use intuition in the nursing process. 5 features including rapid perception, lack of awareness of the processes engaged, presence of emotions, holistic understanding of the situation and overall good quality of the proposed solutions have been defined for the use of expertise and intuition [23]. According to Damasio’s Somatic Marker Hypothesis, the amygdala and orbitofrontal cortex are involved in decision-making process by processing the exteroceptive and interoceptive sensory information in somatic/emotional situations. Decision-making is largely influenced by the changes in somatic feelings and emotions. Regulatory mechanisms appear as somatic feelings and emotions consciously or unconsciously and may occur in many stages of decision making process [22,24]. The somatic state reveals an unconscious bias signal compatible with the desired action. The signal can be objectively measured by the presence of a skin conductive response. Both theories indicate that intuitive decision-making in nursing is a decision that is guided by a domain specific somatic state [22] (Figure 1).

Figure 1: Theory of Intuitive Decision-Making in Nursing [22].

Using Intuition in Nursing
A number of studies have attempted to develop an understanding of intuition in clinical practice in specialist areas of nursing, each associating the phenomenon with different terms. A number of studies have attempted to develop an understanding of intuition in clinical practice in specialist areas of nursing, each associating the
phenomenon with different terms [1].

Using of intuition as a component of clinical expertise is described in many professions. Recognition of intuition in nursing has risen over the past 30 years. Intuition is a quality that nurses have traditionally valued [10,25]. Intuition has been identified as an important factor in the development of nursing knowledge [26]. Intuitive theories suggest that knowledge regarding about decision making is almost impossible to commutate, that nurses are unable to express what it is they do [27]. But there are a few theories about using intuition as a component of decision making in nursing to determine the relationship between the nurse’s application of holistic awareness [26,28].

Intuition has gained acceptance and respectability as a decision-making tool in 1980s. In the nursing literature, intuition is recognized as an important component of decision-making theories [1]. Nurses have to make decisions often under conditions of great complexity and uncertainty. These decisions have to be made correctly and frequently with incomplete, conflicting, or ambiguous data [27,28].

There are many factors have contributed to the acceptance of intuition as an effective constituent of decision making in nursing. Research has indicated that analytic, systematic techniques are not always useful in guiding decisions. The other factor that supports this use of intuition, identified by both Agor and Crossett is physiologic evidence. The brain has two potentially independent mental systems: the left brain (the center for intellect) and the right brain (the center for intuition). These two hemispheres are connected by a bundle of nerve fibers that have the potential to work in harmony. Integration of these hemispheres allows for an increase in total productive capacity of the brain [29].

As nursing care for patients in very different situations, decisions are often based on two thought processes. The first type of thinking is analytical, rational, and linear, focusing on observable data. The second type of thinking is an unconscious process that occurs rapidly, holistically, and is rooted in experience and emotions [30]. The latter process is intuition. Intuition has been argued to be a legitimate and essential component of decision making. Recognitions of intuitive decisions by nurses that they rely on their intuitiveness most often in making decisions. Nurses have also their experienced practise intuitively by virtue of having developed, through critical thought [26].

Despite these developments about intuition, today’s health care moved to focus in which clinical practice became research based. With the demand for evidence-based practice (EBP), nurses have been encouraged to forgo the use of intuition. Evidence-based research is frequently denigrated. Because it is difficult to investigate and quantify, intuition has tended to be seen as unreliable, unscientific and unsuitable for nursing practice [10,25]. Therefore, intuition has been diminished and is often referred to as a mystical quality that cannot be trusted [30].

Although EBP is an important factor in student nurse education, schools of nursing have ignored the addictive of intuition to nursing practice. The ability of nurses to learn through patterns of definition is the foundation of intuition. Because not all decisions can be made based on the current best evidence, it is essential for nurse educators to understand the concept of intuition before downplaying or ignoring its importance [26,30].

In nursing education, there are four ways of learning. These are empirical, aesthetic, personal, and ethical knowing. Intuition has been considered the “art of nursing” or “aesthetic knowing”, and “tacit knowledge” or “personal knowing” [10,28]. Scientific, rational thinking dominates the teaching and learning process emphasized by nursing educational programs. Nursing (as coordinated action) appears intuitive to the outside observer and feels internalised within the practitioner; decision making and clinical judgment are the result of an almost unconscious level of cognition [27].

How intuition supports the critical decision-making process has not been clearly explained. The researches carried out indicate that the nurses use intuition in decision making despite the lack of information about the use of intuition [31]. The fact that intuition has such an influence in nursing is a result of our feelings [3]. Farr-Wharton, Brunetto and Shacklock express the use of intuition in nursing as the guidance of nursing care [32]. Intuition is accepted as the nursing art, aesthetic knowledge, tacit knowledge or personal information [33,34].

Carper stated that the intuition is the foundation of nursing knowledge, described this information as the “nonverbal”, “specific information” of nursing and stated that it indicated the art aspect of nursing. He classified the artistic knowledge acquisition methods in 4 categories [35].

- Empirical Information: It is real information obtained by science or external factual information.
- Individual Information: The information and attitudes generated by the individual from his/her self-understanding; he/she can imagine himself/herself in place of the patient, the information which is used during patient-nurse relationship.
- Moral Information: The information and attitudes generated from an ethical structure, awareness on ethical questions and choices.
- Aesthetical Information: Developing awareness on the situation in that moment, putting into practice, awareness about the patient and his condition, the perception of the individual within his/her integrity.

There are conflicting opinions about the use of intuition in the clinical decision-making processes [36]. However today, intuition is cognitive skill that helps clinical action leading to individual-centered care and allows for evaluating the state of the individual. Because intuition is a result of the direct perception of the expedient behaviour which has been accepted as scientific information in time and should not be ignored. Intuition is a process that ensures
the rapid actuation of the nursing decision in order to prevent the deterioration of the patient’s condition [37].

Conclusion
The intuition exists and has a valid and important role in nursing. Intuition was identified as a manifestation of transpersonal caring in the art of nursing practice and was deeply connected to caring as the moral ideal of the nursing profession. Intuition is a rapid, unconscious process based in global knowledge that views the patient holistically while synthesizing information to improve patient outcomes. To understand the intuitive approach to decision making, nurses need to first identify intuitive feelings and intuition use in practice.

According to this article, it is recommended that the following:
• To establish the use of intuition as a professional and useful tool in nursing.
• To bring into the intuition the open.
• To develop creative methods to facilitate nursing students’ intuitive thinking.
• To allow nurses to understand its importance to nursing practice.
• To enhance the quality of patient care via using intuitive thinking in nursing.
• To need for further investigation into the intuitive components of decision making.
• To do more qualitative and quantitative studies about intuitive thinking in nursing.

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