

**Patient preferences in nursing decision-making: Grounded theory study on communication tools in personalized nursing care in EBP**

**Running head: Patient preferences in nursing decision-making in EBP**

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**Author contributions**

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Made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;	RdH, TN
Involved in drafting the manuscript or revising it critically for important intellectual content;	RdH, TN
Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content;	RdH, TN
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## **ABSTRACT**

**Aim:** To develop an understanding of how nurses obtain and take account of patient preferences in shared decision-making processes in evidence-based practice to provide personalized nursing care.

**Design:** Qualitative grounded theory.

**Methods:** This research was part of a PhD study successfully completed in December 2015. Semi-structured interviews were conducted with 27 nurses in four medium-sized hospitals in the Netherlands. Additionally, seven nurses were observed during their shift on the ward. Constant comparative analysis underpinned by Strauss and Corbin's framework was used.

**Results:** Three communication tools of nurses were identified to discern and attend to patient preferences to provide individual tailored nursing care: 1) A click-making tool that enables to build rapport instantly; 2) The use of antennae to carefully monitor the individual patient's needs; 3) Asking empathic questions so that the care is fine-tuned to the individual patient's preferences. This way, the nurses attempt to provide optimal nursing care to enhance the patient's perceived quality of life.

**Conclusion:** The excellent nurses have a set of three implicit and intuitive tools to continuously attune their professional care to individual patient preferences in the evidence-based practice to provide personalized care. The nurses consciously spend time to discover patient preferences. The use of the implicit communication tools appears to be part of the nurses' professional knowledge, and deserves further research as a follow up to this study. Considering the importance of taking account of patient preferences in the evidence-based practice, these findings have international relevance to nursing professionals across the world.

### **Impact: What problem did the study address?**

- Literature does not describe how patient preferences in the evidence-based practice (hereafter EBP) should be acknowledged.
- How nurses obtain and take account of patient preferences in shared decision-making in nursing in EBP to provide individual tailored nursing care.

### **What were the main findings?**

- Nurses use implicit and intuitive communication tools to identify patient preferences: 1) a click-making tool to build rapport instantly with the patient, 2) using antennae to carefully monitor the individual patient's needs, and 3) asking empathic questions about the experienced situation.
- Excellent nurses consciously spend time to discover patient preferences.
- The input contributes to the experienced quality of life of patients.

### **Where and on whom will the research have impact?**

- Policy: The findings in this study indicate that it is necessary to acknowledge the 'soft skills' in nursing care, for this is a guarantee to individual tailored care.
- Practice and education: More attention has to be paid to the learning process of how to learn and to work with the implicit tools.
- Research: The use of the implicit and intuitive tools is an underexposed element of nurses' professional knowledge and deserves further research.

**Key words:** evidence-based practice, grounded theory, nursing, nursing decision-making, patient preferences, personalized nursing care, phronesis, practical wisdom, quality of life, shared decision-making.

### **INTRODUCTION**

Evidence-based practice (EBP) has a place in nursing practice that can no longer be ignored. In the literature, three sources of evidence are distinguished: scientific knowledge, best practice information about what works, and the norms, values and preferences of the individual patient (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). Although the rule in EBP is to carefully balance the three sources of knowledge, there is still a preference in the literature for scientific knowledge. The emphasis on scientific knowledge in EBP is partly due to the fact that quality improvement policies focus on objectively defined and externally determined result agreements (Egerod, 2006; Haggerty & Grace, 2008; Haynes, Devereaux, & Gyatt, 2002).

Nurses complain that keeping track of the result agreements prevents them from practicing the core of their profession: enhancing the well-being of patients by caring for them in a personal relationship and contributing to their healing (Bishop & Scudder, 1997). Nurses feel they lack the scope for personal attunement because they need to spend so much time on completing quality instruments. They feel the need for professional space and the freedom to decide for themselves which instruments are needed to achieve good care, based on their own professionalism (Avis & Freshwater, 2006; Freidson, 2001; Sellman, 2011; Sennett, 2008).

Good nursing care in EBP is care in which scientific evidence and knowledge from best practices are balanced with the values and preferences of the individual patient in his or her context. In this person-centered care, the patient feels acknowledged and, where possible and feasible, can actively participate in the care process (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000; Sidani, Epstein, Bootzin, Moritz, & Miranda, 2009). The problem is that the literature does not describe how patient preferences should be acknowledged in EBP.

## **Background**

Patient preferences are described by Sackett et al. (2000) as the unique preferences, considerations and expectations that the patient brings to the clinical encounter. What is specifically meant by this and how this is incorporated in nursing decision-making is barely described in the literature (Den Hertog, 2015). Recent literature has even less attention for the role of patient preferences in nursing decision-making, focusing instead on scientific evidence in decision-making. In an extensive study by Den Hertog (2015) into the operationalization of the concept of patient preferences, it appears that the interpretation strongly depends on the scientific tradition adhered to.

In the quantitatively oriented tradition, patient preferences are operationalized as an objectively measurable concept that is expressed in their manner of participation in decision-making. Thus, patients can leave decisions entirely up to the professionals, or they can partly participate in decision-making, or the patients can be placed fully in control. In other quantitative studies, patient preferences are explained as the choice made by the patient in the different treatment options (e.g., Charles, Gafni, & Welan, 1999; Florin, Ehrenberg, & Ehnfors, 2005; Smoliner, Hantikainen, Mayer, Pnocny-Seliger, & Them, 2009).

In studies in the qualitative tradition of scientific research, patient preferences are seen more as personal characteristics and wishes of the patients in the care situation. These studies focus on alignment with the individual in relation to scientific evidence (e.g., Avis & Freshwater, 2006; Elf, Putilova, Ohrn, & Von Koch, 2009; Rycroft-Malone et al., 2004). The qualitative tradition emphasizes that social and cognitive aspects of the individual patient and his family are identified through communication and are an essential part of joint decision-making (Risjord, 2010; Sellman, 2011).

The different operationalizations of patient preferences in the quantitative and qualitative tradition hinder a better understanding of what is meant by balancing the preferences, considerations and expectations of the patient in decision-making in EBP. It also remains unclear how nurses in the hectic of everyday practice can discover patients' individual preferences and use them in decision-making. A grounded theory study on how nurses take account of individual patient preferences in EBP is conducted.

## **THE STUDY**

### **Aim and research questions**

The aim of the study is to develop an empirical understanding of how nurses take account of patient preferences in shared decision-making processes in evidence-based practice to provide personalized nursing care. The main research question is: How do nurses, known for providing adequate personalized nursing care, take account of patient preferences in their daily decision-

making to provide good and highly qualified nursing care? The following sub-questions are formulated:

1. What can nurses, known as providers of good and adequate care, tell about taking account of individual patient preferences and how do they use this knowledge in their everyday nursing decision-making to provide personalized care?
2. What can be observed regarding their attunement to patient preferences and their use of the discovered implicit and intuitive tools in daily nursing practice?

### **Design**

A qualitative grounded theory design was chosen to better understand how nurses take account of patient preferences in daily nursing care. This research of daily reality is designed in an inductive way through interview research (Corbin & Strauss, 2008; Strauss & Corbin, 1998). Participant observation was used as a method of triangulation in which the observer was unobtrusive in the situation and made field notes (Spradley, 1980).

### **Sample/Participants**

Employing purposeful sampling, between 2011 and 2013 contact persons in four medium-sized hospitals in the Netherlands were asked to send an email to the nursing teams on the wards. The question was which colleague they should choose to provide nursing care for him- or herself or his/her loved ones because of a strong technical knowledge and of the warm personal bond in the care provision (Tejero, 2010). The colleague could contact the researcher via email after the intended candidate's consent. Of the population ( $N > 700$ ), 27 nurses were nominated. These nurses were approached by email for an interview appointment. The invitation email stated that nurses who nominated themselves would represent a potential bias and would therefore be excluded from the study.

Additionally, the 27 nurses were asked to participate in an observation study during one shift. Four nurses agreed, and another three nurses who were notified when the interview investigation had already been completed, were also willing to participate in the observation study. This brought the number of observed nurses to 7. A total of 58 hours of nursing care on the wards was observed.

### **Data collection**

Data were collected by conducting interviews ( $n = 27$ ) that took place in the meeting room of the nursing wards. Data saturation occurred around the number of 20 interviews. Data collection was

continued because the last seven nominations were received from another hospital, and it was interesting to see whether the same findings were found for these nurses.

Nurses were interviewed one-on-one using a semi-structured format with some guiding questions. Each interview lasted between 40 and 70 minutes. The interviews were transcribed verbatim and the information collected during the investigation in the form of memos was linked to this. Data collection and data analysis took place in a process of constant comparison in order to find the central concepts in the research. According to Strauss and Corbin (1998), an initial interview guide should be provisional and revised as concepts begin to emerge.

The theory that seemed to unfold in the interview study was checked with observation research that served as triangulation of the research method (Corbin & Strauss, 2008). Based on an observation schedule, data was collected on how the tools suggested or described by the nurses were apparent and/or used in practice. During the observation research, field notes were made of typical observations.

### **Ethical considerations**

Permission for the study was obtained from the university ethics committee. Managers in the four hospitals gave their consent to the research on the condition of anonymity of the care institution. The participants all signed the informed consent form, and any data that could lead to them personally were anonymized. During participant observation, verbal consent was obtained from the patients involved for the researcher to be present at the care moments to observe nurses' acting. Data was stored on an external hard disk and locked away by the researcher.

### **Data analysis**

According to the tradition in grounded theory, data collection and data analysis partly took place side by side until saturation was achieved around the discovered core concepts and these were categorically linked to each other (Charmaz, 2006; Strauss & Corbin, 1998). The verbatim transcripts were analyzed using the data analysis program Atlas.ti 6.2, through open, axial and selective coding. By using the constant comparative method, generated codes were compared with data and emergent concepts and as a result, preliminary sub-categories and categories emerged. In the end, three coherent categories could be constructed.

### **Rigor**

Corbin and Strauss (2008) elaborate reliability and validity in a grounded theory study in terms of four important criteria: the recognizability of the results for the intended audience (fit), the applicability of the developed new insights (applicability), the elaboration of the concepts

(conceptualization), the logical flow of ideas and wealth in the context, and the proof that memos are included (contextualization). The fit was achieved by applying member checking to the participants during the research process. They were asked about their degree of recognition of the formulated set of tools and on what points the formulations ought to be modified. Furthermore, there were discussions in the research team during which peer debriefing was applied.

The applicability of the new insights was discussed with experts in professional practice as well as in education. Where practice experts fully recognized the insights, the experts in education remained hesitant about the applicability in professional education. The elaboration of the concepts was ensured by a continuous collection of data alternating with data analysis until theoretical saturation was achieved. The findings are a valuable addition to the body of knowledge of nurses, with which the importance of the study has been established. Contextualization was shaped by the logical flow of ideas that the participants presented and the recording of methodological decisions in the reflexive journal (Corbin & Strauss, 2008; Lincoln & Guba, 1985) that was discussed critically during consultations with the supervisor. In the interviews, the aim was to gather rich variation by further explaining various stories of complexity. Memos prepared during the interviews and the field notes were visibly incorporated into the results of the study and presented to the nurses for feedback.

## **FINDINGS**

### **Demographic data**

A total of 27 nurses were nominated to the researcher from the four participating hospitals. After completing the interview research, three more nominations were received. These nurses only participated in the observation research. From the nurses who took part in the interview research, 93% were female and 7% male, corresponding to the normal distribution in the profession (Central Office for Statistics, 2016). The age varied from 20 to 56 years, with ten nurses younger than 30 years. Two thirds of the nurses had completed a secondary vocational education; the others were of an undergraduate or graduate level. The group with 6-10 years of work experience was less represented, see Table 1.

Table 1

*Demographic data participants*

	<i>n</i> = 30
<b>Gender</b>	
Female	28
Male	02
<b>Age (years)</b>	
20-29	10
30-39	07
40-49	06
50-59	07
<b>Education</b>	
Secondary vocational education	19
Undergraduate	05
Graduate	06
<b>Experience (years)</b>	
0-5	09
6-10	04
11-20	08
>20	09

**Identifying individual patient preferences**

The participants in this empirical research report that patient preferences play a part in their nursing action, partially consciously. They emphasize that the preferences of individual patients are an important aspect in the careful coordination of nursing care, and that norms, values and preferences cannot simply be assessed. It is important to discuss this regularly and to remain in touch with the patient on this subject. This is necessary because the preferences may vary depending on the situation in which the patient finds him or herself in. For example, a patient with a lot of pain can initially refuse help because of a sense of independence, but after a while he realizes that he cannot succeed on his own.

The nurses in the study think that patient preferences mainly pertain to feelings of safety and confidence, having an eye for pain and grief, and being attentive to suffering. When questioned about entering into and maintaining a good care relationship, three communication tools were discovered that the participants use to discern and attend to patient preferences. This is the basis to provide personalized nursing care: they create a 'click' with the patient, use antennae to monitor the situation, and ask empathic questions to know how patients feel in the current situation.

*Using a click-making tool*

According to the nurses, good care can only be provided if there is an interactive connection with the patient. The nurses say they actively engage in this connection, also called 'click': "I am a person who is more naturally prone to clicking", according to N19. By using examples, they describe how they can

make a click within the first two minutes of the meeting, and continuing to do so until the end of the hospital stay. Virtually all nurses succeed in making this click with the patient, so that the communication is effective and patients can participate more easily in their healing process.

As a result, the patient can surrender to the situation, and he dares to indicate how he really feels, and he feels that it's alright to be himself. [Nurse10]

The nurses consciously pay attention to the patient and approach the other as an individual. By making physical contact with a hand on arm or leg as a sign of attention and closeness, the patient is encouraged to express what he is concerned about or afraid of. It is noticed that humor often promotes a click and can give access to the patient's deeper feelings:

Uh, I'll put them at ease with jokes. And then I start from, if there are escorts, I ask them 'cup of coffee'? And then I say, you will soon get a cocktail full of medicines, which is much better. And then they immediately start to laugh, for example. Or I say, for example, a stupid example, eh, the latest creation of the house, our surgery jacket! Then they start to laugh. Those little jokes ... The moment you can break through that stress and the tension with a bit of humor, they expose themselves. [N25]

Nurses experience sufficient time for personal contact despite the hustle and bustle in the department. When there is a click, there is targeted communication so that nurses eventually have more time to talk about other things or to coordinate the care process with the family. Sometimes it is not possible to achieve a click between the nurse and the patient. In such a situation, the nurse usually asks a colleague to take over the care so that this person can make a new attempt.

The observations confirm that nurses communicate in a warm and respectful way. Nurses are physically close by communicating within a meter from the patient and putting an arm on their hand or around their shoulder. Even if it is busy on the ward they take time to tune in.

It takes less time for me to listen and to know that someone feels heard than that I need to respond to his bell ten times. That is not necessary if you just make time to listen. [N13]

### *Monitoring with antennae*

When a click is made, it is easy for nurses to monitor whether patients feel safe and confident. These feelings are indicators for the nurses for how the care situation is progressing. Nurses work intuitively and try to sense directly how the patient is doing in his situation. The monitoring is often performed

unnoticeably by 'gauging' the patient in passing; some nurses pick up signals without even seeing the patient. If a patient rejects the check or does not look well (posture in bed, pale, signals of pain), then the nurse makes time to perform a check. Monitoring the situation and the mood of the patient is permanent, according to the nurses. The alarms of the antennae are described as a 'gut feeling', "a kind of inner itch, you have to go to the patient to check what's going on." When asked to describe such a feeler, one nurse said:

It's something on my skin, I do not know what it is, but you can see that, you notice that, you feel that. I do not know how it works ... [N12]

Also:

Eh, that extra feeler that you have, I do not know. I'll pay attention to that, yes. You have a sharp eye on the patient, I don't really get it, I have thought about it but how can I explain it? It's like possessing a sensor. [N13]

Several nurses told that in this way they discovered a bleeding episode in good time, were able to save an infusion, or were able to appease a looming family quarrel. During the observation, a nurse pauses for a moment in a room with seriously ill people. When asked what she did exactly, she answered that she was feeling with her antennae whether one of the patients in the room was so bad that he would soon die. Some nurses think that they already had that sensitivity to signals as a child and developed them further in their work. Others think it is part of the nursing profession and that the knowledge about this is learned in practice, "at least, if you are open to it."

#### *Ask empathic questions*

Partly because of the click, the nurses experience that they have quick access to the thoughts and feelings of patients. Moreover, working with antennae requires constant communication and coordination, because the incoming signals have to be checked and action may be required. The empathic questions are mainly about how the patient is feeling and how he personally assesses the situation. The nurses indicate that it is about the patient's story and how they can connect to the quality of life that the patient aspires to. They want to help the patient to anticipate what is to come. One nurse explained:

I do not have to know all the things, only those things that make me able to provide the care well. [N27]

The nurses describe the risk of asking empathic questions: if patients become emotional, it may take more time. In addition, you can expect questions that may affect you. For example, N7 describes how she tells other young parents in the children's ward about her own experiences after the birth of her son. "The burp cloths were for my tears." She thinks her story appeals to others because they feel acknowledged in their powerlessness. N10 allows the patients in her personal inner circle, because then she is more happy in care giving, she can listen better and will forget less when carrying out her care. Other nurses note that they want to monitor their time well and to distribute it proportionately over all patients. They state that they do protect their privacy in order to remain professional.

Asking empathic questions is motivated by an interest in the patient as a person and by the search for ways to optimally connect in nursing care. N3 stated that she reports more extensive than allowed, despite a warning from her supervisor to follow the rules. She says:

But at that moment the patient is a priority. And then I think okay, then I will sit next to him. And then I will ask exactly how it is, where is the pain, how it was before, was he, hey, when did it start (...). But at some point you have to finish the medication round (...). So you just try to go along with it and offer alternatives. And then I notice that the patients when they see how seriously you deal with the questions that (...) first of all, that they get a lot of rest and that they also think, indeed, you're right. Just try, persevere. And then you go along with the patient in that process. Because you take him with you, you do not leave him somewhere in the middle of the road. [N3]

The nurses emphasize that conversations with family are automatically a part of it. They visit during the visiting hours or the patients contact family at home by telephone. In the observation, we noticed the feelings of safety and confidence in the family meetings. The family is asked whether father may have deteriorated when walking or how the family at home sees hospital discharge. N13 describes the consultation with the patient, his family and with other nurses, doctors and physiotherapists as building a frame of reference for nursing decision-making. One of the nurses summarizes what others have suggested: "Yes, teach me how to take care of you in this situation." [N20]

## DISCUSSION

The findings of this study provide insights into how excellent nurses in the hospital take account to patient preferences in evidence-based practice with a set of three implicit and intuitive communication tools. In the tradition of the grounded theory, a substantive theory emerged on

attuning to patient preferences to tailor individual nursing care. To continue the process of grounded theory, in the last step the substantive theory is tested against the existing literature (Corbin & Strauss, 2008).

### *Communicative tools*

Having a 'click' with another person is described in the literature as having an instant connection, a connection that is immediately established (Barelds & Dijkstra, 2007; Brafman & Brafman, 2010). Brafman and Brafman (2010) describe how people can actively create this click and offer some examples of how the tool is used by nursing professionals. They refer to the ability to 'make the click' as part of the collective knowledge acquired during the nurses' expertise development. They provide examples of how nurses create and maintain the click in order to achieve the best nursing care for the patient in his or her specific situation. The active use of the 'click-making tool' in the nursing profession is not found in other sources.

The second tool that nurses use is to monitor the click with 'feelers' or antennae. Argyle and Trower (1979) describe how professionals in people-oriented professions use 'antennae', and explain how communication is conducted on an emotional layer accessible to both the patient and the nurse. The authors emphasize that the antennae can only be used effectively if the quality of the communication is good. Houtepen and Hendriks (2003) describe working with antennae as a virtue that helps to tailor existential questions in palliative care. The present study found that antennae are not only used to monitor the psychological state, but that they also monitor the physical condition of the patient. Although this tool has been mentioned a number of times in the literature, it remains unclear how the tool is acquired and how it works.

The third tool, asking empathic questions to carefully coordinate the patient's perspective and the perceived quality of life, has not been described previously as a tool in the nursing profession. Gastmans and Dierckx de Casterlé (2000) emphasize that good care requires taking account of the patient's feelings of safety and confidence. However, they provide little information about how those feelings can be explored and anticipated. They state that this element of care only gains full significance when novices in professional practice, in imitation of their experienced colleagues, also start an affective caring relationship. It is not found in the literature that answers to empathic questions contribute to forming a broad frame of reference in the decision-making process. Rodney (1997), in her PhD study, emphasized the power of a well-formed frame of reference in clinical nursing decision-making, but did not give any suggestions on how nurses can actively shape this.

### *Implicit and intuitive knowledge*

The use of the implicit and intuitive tools in nursing professional practice appears to be part of nurses' practical knowledge. To learn more about this practical knowledge, Patricia Benner and her research group spent decades researching this field (e.g., Benner, 1984, Benner, Hooper-Kyriakidis, & Stannard, 2011). Benner emphasizes the internalization of knowledge in professional activities and refers to this as expertise. She states that nurses need a period of three years after completing their formal education to develop this expertise. Based on Benner we were able to conclude that the tools found in this study are part of nursing expertise, but it may be considered remarkable that the current study also found these tools among novice nurses.

It is unclear why Benner did not identify or discuss the tools found in this study. She does speak about attunement to patient groups, but individual attunement is an ethical matter that is embedded in clinical knowledge, she writes (Benner, 2004). Some critics write that Benner neglects to note the implicit knowledge involved in matching care to individual care recipients, due to the strictly phenomenological approach of her research (e.g., Cash, 1995, Effken, 2001; English, 1993; Peña, 2010). Benner (2004) has responded to such criticisms by referring to a notion derived from Aristotle, namely 'phronesis', as skill involving good practice and wise decision-making. According to her, such practical wisdom is not part of nurses' practical knowledge. However, others claim that practical wisdom is pragmatic, variable, contextual and connected to action in practice (Risjord, 2010; Sellman, 2012).

It may be that the tools found by the current study are essential to the skill of wise decision-making in professional nursing practice. By using these tools, the 'good' is found in the proper alignment with the patient and his preferences, in which there is room for the patient's own perspective (Kemmis, 2012; Kinsella & Pitman, 2012).

## **CONCLUSION**

Excellent nurses, known for their adequately designed individualized care, use implicit and intuitive 'tools' to tailor their care to patients' preferences and thus help achieve shared decision-making in nursing care in EBP. These communication tools are: 1) A click-making tool that enables to build rapport instantly; 2) The use of antennae to carefully monitor the individual patient's needs; 3) Asking empathic questions so that the care is fine-tuned to the individual patient's preferences. Additionally, this information is used in a broad frame of reference in the nursing decision-making process, to contribute to the patients' perceived quality of life and favorably influences the outcomes in healthcare. An interesting finding in this study is that these excellent nurses reserve time for careful listening. It would be interesting to further research and understand the experienced dimension of 'time' in 'click' moments of instant connection. In this study, the balancing of patient preferences in combination with scientific evidence and best practices in care provision is linked to

the skill of wise decision-making in professional practices. The use of implicit tools to identify and monitor patient preferences appears to be part of nurses' professional knowledge, but it remains an underexplored element and deserves further research as a follow-up to this study.

### **Limitations**

A limitation of the study was that the participants were selected by their colleagues for their practical wisdom and that therefore personal qualities and departmental cultures remained underexposed. Therefore, application and transferability of findings to larger populations of nurses may be limited. Another limitation was that the research only took place among nurses. It would be interesting to ask patients about nursing qualities and shared decision-making in nursing.

### **Conflict of Interest statement**

No conflict of interest has been declared by the authors. This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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