

Action Research Using the Nursing Model on Education (TK Model): Outline of the Model version 6.3 and the Usefulness in Three Action Research Implementations

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[Objective]

To develop the "TK model," a nursing model that incorporates nurse education on how to approach and implement patient education and study its usefulness through action research.

[Method]

The model was developed starting in 1994, based on 215 cases of patient education worked on by 24 researchers (8 clinical nurses, 15 educational researchers, 1 other). The researchers described situations that related to behavior modification in patients and extracted elements to create a model. In August 2010 the model was refined and version 6.3 was created. As of July 2011, the model's structure, elements, and overall concept continue to be studied.

Action research was conducted using the model at three different hospitals between February 2008 and August 2010. The model development research group of 24 researchers split up to give explanations of the model and participate in case review meetings at the three sites. There were a total of 12 clinical nurses among the research participants and 31 nurses who participated in the study meetings. The data was collected from interviews with the participating nurses; from recordings of the study meetings, case review meetings, and discussion meetings; from participant observation records, etc.

Hospital A: The facilitator was the head nurse for education in the nursing department of the hospital affiliated with University A. She was also a researcher in this research. The research participants were five staff nurses from Ward A, while the study meeting participants were nursing administrators and staff nurses both from Ward A and from other wards.

Hospital B: The facilitator was a staff nurse (CNS) at the same ward as the research participants (Ward B). She was also a researcher in this research. The research participants were five staff nurses from Ward B, while the study meeting participants were nursing administrators and staff nurses from Ward B and staff nurses from other departments.

Hospital C: The facilitator was a university researcher and researcher working on this research. The research participants were two staff nurses from different departments at the University C hospital, while the study meeting participants were nursing administrators and staff nurses from different departments at the University C hospital.

The method of analysis used was to keep in mind "what kind of changes arose in the participating nurses from case review meetings using the TK model," extract the changes in the participating nurses and other nurses on the wards, and study how the researchers implemented their involvement.

Ethical considerations: Approved by the Japanese Red Cross College of Nursing Research Ethics Review Committee (No. 2007-51) and the research ethics committees of the institutions at which the research took place.

[Results]

1. Outline of the TK model, Version 6.3 (Fig.1)

The model, which makes visible the advanced educational methods of skilled nurses, is comprised of the following five elements, aimed at improving nurses' patient education practice: verbal and behavioral cues and their intuitive interpretation; understanding the person's life and sharing with him/her; tailoring treatment to the person; stepwise searching and a problem-solving educational method; and professional learning climate as a patient education expert (PLC). In the interaction between the nursing care worker and the person, when the nurse has an intent to help the person gain better health, from the moment she perceives something is not going as expected she becomes concerned about the person. In the process of giving nursing care she develops a rapport and looks for the chance to explore with the person ways to carry out therapeutic methods and bring about change in the person. Awareness of the concept of "verbal and behavioral cues and their intuitive interpretation" leads to attempts to "understand the person's life and sharing with him/her" and "tailor treatment to the person."

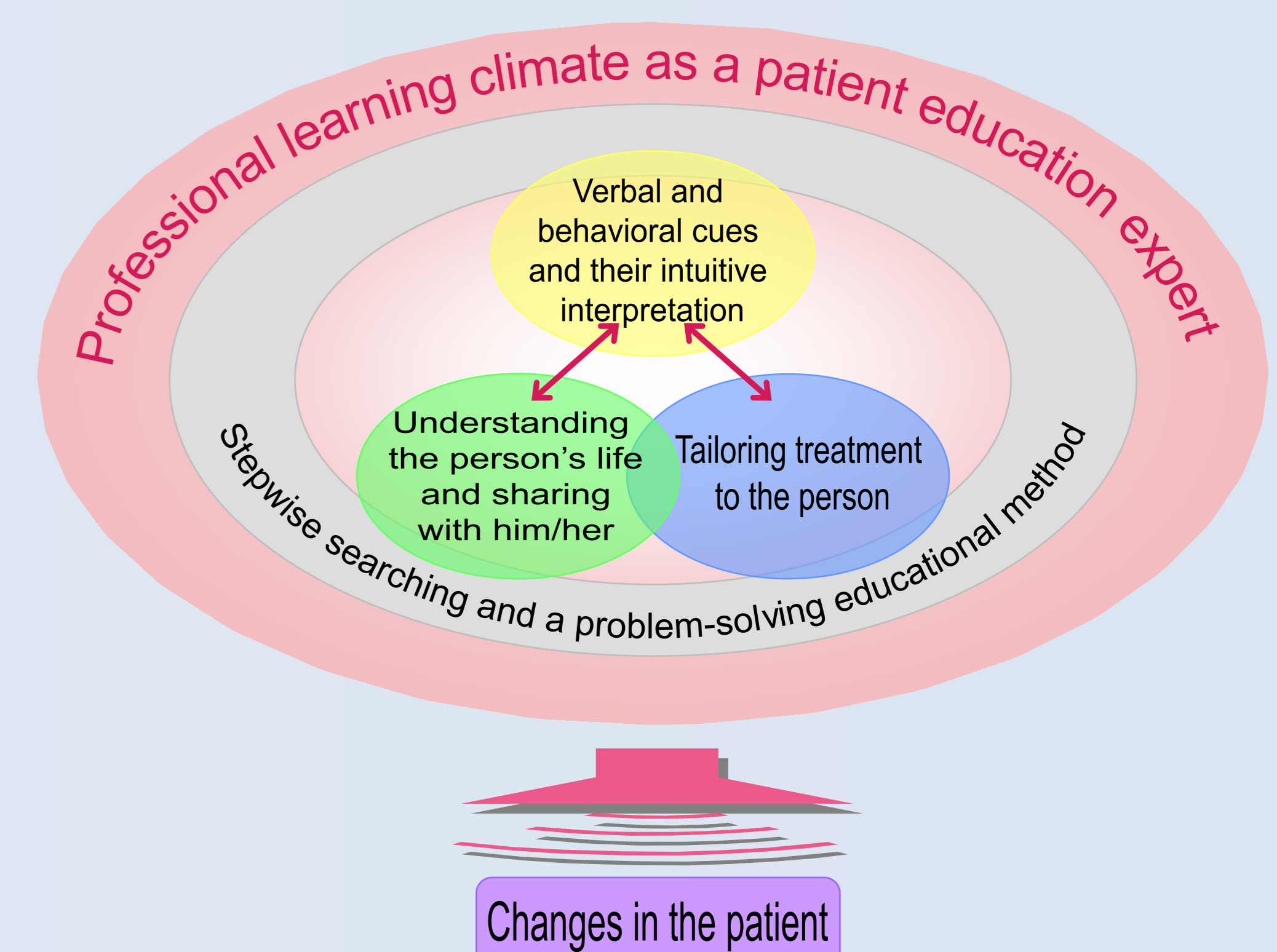
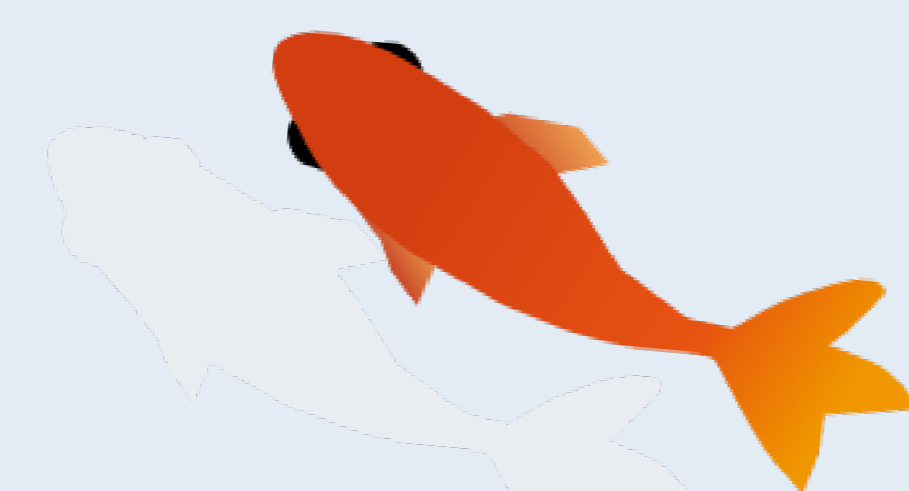


Fig.1 Nursing Model on Education Version 6.3 (TK model)



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Moving from the concept to truly understand the patient and their life as a person and valuing that meaning leads to "tailoring treatment to the person." "Stepwise searching and a problem-solving educational method" are specific techniques used within these three concepts, and the "professional learning climate as a patient education expert (PLC)" serves to amplify and further all of the various functions of the elements. Practice that uses this model is expected to be able to bring about change in the patient, both directly and indirectly.

Definitions of each of these concepts is provided below.

(1) Verbal and behavioral cues and their intuitive interpretation

Verbal or non-verbal signs, signals or information that a patient gives to the nurse, that were quickly caught on and understood by the nurse.

(2) Understanding the person's life and sharing with him/her

The nurse, through interacting with the person, comes to understand how the person perceives and feels about his/her own illness and life events; shares her own thoughts and feelings and other information with the person through talking, while confirming her own and the person's understanding.

(3) Tailoring treatment to the person

The nurse tailors the treatment according to the person's will, symptoms, perception, and life circumstances to enable the person to carry out his/her self-management.

(4) Stepwise searching and a problem-solving educational method

The nurse opens her heart to the person and builds a relationship of trust. She tries to understand the difficulties that the person is having with a treatment method, and further, helps to find a solution to those difficulties. These are specific, practical methods and ways of interacting with the person to use in that process.

(5) Professional learning climate as a patient education expert (PLC)

The attitude or mood of the nursing personnel backed by professional knowledge and experience.

(6) Changes in the patient

The outcome of the model -- changes in or maintained feelings, perception, words and actions, signs (survey data), symptoms, etc.

2. Action Research

Researchers attended study meetings to explain the model as part of action research carried out in the three locations, and also participated in case review meetings. The participating nurses became able to discuss patients' behavior and changed from simply "supplying knowledge to patients" to "aiming to adjust one's handling of a patient based on the patient's reactions."

How the action research, conducted in three locations, was carried out depended on the facilitator (head nurse for education, staff nurse (CNS), or university researcher) and her chosen method of involvement, but in all cases the participants made comments regarding the importance of the various elements of the model in practice, were assured by the endorsement from the model that their approach was appropriate, and gained confidence in the care they provided. Even the clinical nurses who were not research participants became able to speak about patient

behavior and changes. They became more active and even planned new case review meetings for cases that used the model, among other activities.

(For details of the action research, please see the attached handout material.)

[Discussion]

The following phenomena were commonly observed in the action research in the three locations using the TK model.

1. Approval and confidence

(1) Repeated approval from the facilitator and researchers

The participating nurses were surprised that they encountered the same stance (view of the patient and nurse's attitudes in the TK model) even with different researchers and different circumstances and cases. They gained confidence in the validity of their own care.

(2) The combined effect of approval from clinical nurses

High praise for and approval of the care provided by the nurses came not only from the facilitator and researchers, but also from the clinical nurses. This latter approval had more of an impact on the nurses than the researchers' approval. Both combined had an even stronger effect, seeming to boost the nurses' self-image in a positive way.

2. Evidence-based nursing practice (explanatory model: TK model)

(1) Care that nurses had been providing without thinking was analyzed according to the model and evaluated. After this evaluation, clinical nurses learned to carry out nursing practice "consciously" using the model.

(2) The nurses gained peace of mind knowing that the care they provided was evidence-based (explained by the model) and they became able to explain things to other nurses with confidence.

3. Usefulness of the model

(1) The PLC element of the TK model

The view of and attitude toward patients among the 24 researchers was consistent and also comprised the PLC element of the TK model. The PLC element is effective not only for patient education but also for nurse education, which was observed in the same "peace of mind" effect felt by both patients and nurses.

(2) A model capable of explaining care

With regard to the care given to patients, the TK model's elements of "verbal and behavioral cues and their intuitive interpretation" and "understanding the person's life and sharing with him/her" were thought highly of for their ease of explaining behavior specifically. It had the effect of giving nurses confidence to explain their behavior to others by seeing that their behavior was evidence-based (explained by the model).

All of the above suggest the possibility that care using the model leads to high-quality patient education.

[Conclusion]

The TK model was refined and updated to version 6.3.

The usefulness of the TK model in action research that used the model was confirmed.