



The Model of Validity of Pain Management Outcome Evaluation for Tertiary Hospital

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Abstract

The purpose of this research was to develop a valid model for an evaluation of the outcome of the pain management at Tertiary hospital. The research was organized at one tertiary hospital in Phitsanulok province, Thailand between Oct13, 2015 and Mar13, 2016. In the first step, via an interview, the researcher evaluated the responses of the 30 stakeholders. After that, the data together with the findings from many academic papers and researches were synthesized to create a model. The quality of the model was checked by 5 highly educated people. A highly valid model covered 4 components, in which the procedures and the evaluators were different as 1) an evaluation of the threats against the validity of the pain management outcome evaluation 2) an evaluation at an individual level 3) an evaluation at a patient ward level 4) an increase in the validity of the evaluation.

Keywords : Pain management outcome evaluation, Validity in evaluation, Logic models, Metaevaluation

Background and rationale

A pain evaluation is considered one of the crucial treatments for pain. Provided that there is an evaluation and a pain score recorded systematically and continuously, it will be very helpful to the treatment team in following up the after-surgery pain and eventually very effective in curing the pain problem for the patients. However, when looking into many researches, some problems on the pain records and the evaluations were found as follows 1) on the patients : the patients hardly perceived the pain evaluations and the follow ups by the nurses despite the highly well awareness of the nurses. Also, the patients did not understand the procedures of the evaluations, so they tended to give irrelevant information on the pain compared with their present physical expressions. 2) on the health staff personnel : it appeared that the staff did not have adequate knowledge in the treatments and the importance of the pain managements. There were also inconsistent pain evaluations. 3) on the equipment used in the process : in some hospitals, there were not enough tools and equipment in the process of the pain evaluations, nor were there any well-covering pain evaluation forms, therefore, many details like the coldness on the skin, the pouring sweats, etc. In some hospitals, there were some but not proper for the cases. 4) on the other areas : there were not any good recording systems, any follow-ups or the pain management outcome evaluations, any quality indicators and any proper actions

Moreover, there was a finding in a study. It showed that a patient talked irrelevantly compared to the health staff and the bad effect would occur. In case the physicians and the nurses evaluated the level of the pain of the patient lower than that evaluated by the patient himself, the pain reducing medicines would definitely be prescribed under doses or too low for the need of the patient. This; therefore, would not be effective in controlling the pain. On the other hand, when those doctors and the nurses evaluated it more seriously than it was. The result would be the higher doses of the medicine for the patient and that would very much create a negative effect to the patient.

Those mentioned mistakes from the pain evaluations revealed that there was a lack of validity in evaluation. The difficulties affecting the validity of the pain evaluations came from the evaluators, the methods including the tools and the equipment. From the said problems on the pain assessment and the pain management outcome evaluation, which paid a direct effect towards the pain therapy as having been presented. The researcher; therefore, come up with the idea to develop a good valid model for an evaluation of the outcome of the pain management at Tertiary hospital. This model focused on controlling all the possible obstacles, which definitely increased the validity of the evaluation.

The purposes of the research

- 1) To study the present conditions, the obstacles and the needs for the model of pain management outcome evaluation at Tertiary hospital.
- 2) To create a valid model for an evaluation of the outcome of the pain management at Tertiary hospital .

Protection of human right

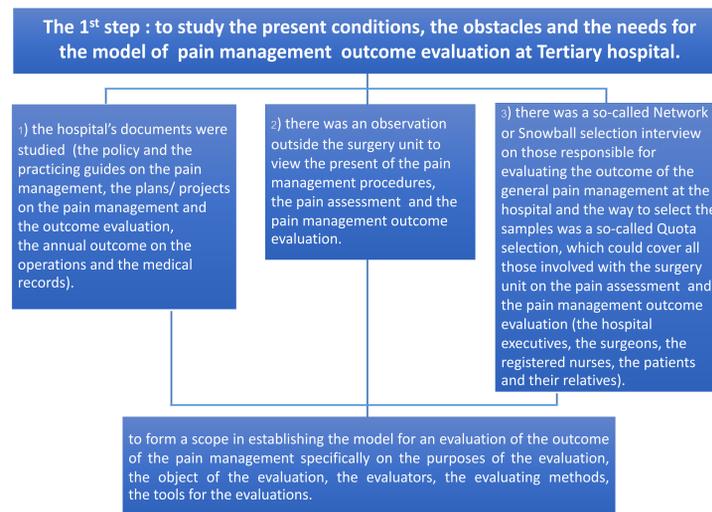
This research project was approved by the moral committee of a research on humans, Naresuan University (the project number 536/57)

Data collection method and the results

In this research, a so called Research and Development method was used with 2 steps of the procedures. The results were as :

The 1st step : to study the present conditions, the obstacles and the needs for the model of pain management outcome evaluation at Tertiary hospital.

The research conduction was operated at Tertiary hospital in Phitsanulok province, Thailand between Oct 13, 2015 and Jan 13, 2016. The samples were those people involved such as 3 who were responsible for evaluating the outcomes of the general pain management at the hospital, 5 hospital executives, 3 surgeons, 9 registered nurses (3 with 1-5-year experience, 3 with 6-10-year experience and 3 with more than 10-year experience), 5 surgeon's patients and 5 patient's relatives. The data collection went through 3 procedures as shown in the picture.



The studies showed that both the pain assessment and the pain management outcome evaluation at the tertiary hospital appeared to lack validity in evaluation. The threats to validity of the evaluation came from several sources such as the evaluators themselves, the evaluating methods, the pain evaluating tools, the interpretation and the presentation of the evaluation. From this research, some important information was brought up to the surface and would become a good frame work for a fine establishment with validity of the evaluation of the outcome of the pain management at the tertiary hospital

The 2nd step : to create a valid model for an evaluation of the outcome of the pain management at Tertiary hospital. The length of the research was from Jan 14 to Mar13, 2016

The researcher got the data received from the 1st step to synthesize then bring together with the results of the studies on the academic papers and several researches to create a valid model. The quality of the model was checked by 5 highly educated people. A model of validity of the pain management outcome evaluation at Tertiary hospital was a new type of a health evaluation that focused on the accuracy standards. The model covered 4 components, in which the procedures and the evaluators were different as

1) an evaluation of the threats against the validity of the pain management outcome evaluation : the external evaluator would do the evaluation with the validity framework by Peck, Kim and Lucio (2012), which was the base of the evaluation covering the measurement validity, the design validity, the interpretation validity and the usage. This evaluation left a room for those involved to fix the outcome, the pain management according to the Logic model (Sonpal- Valias, 2009) and design ways to control the threats against the evaluation of the outcome of many pain managements. This was to increase the validity of the evaluation according to Greene (2011)

2) an evaluation of the outcome of the pain management at an individual level : pain assessment at an individual level in accordance with the so-called ABCDE pain management (Potter and Perry, 2005). The patients would do the evaluation and record the results themselves and there also were nurses on duty doing the evaluation on the pain of the patients in accordance with the so-called OPQRSTUV method (VIHA Quality Council, 2008). The results from the self-evaluation on the pain of the patients were used in managing the pain of the patients and recording the patient report according to the nursing process.

3) an evaluation of the outcome of the pain management at a patient ward level : the head nurses at the patient ward did the evaluation via a bottom-up approach (Chen and Garbe, 2011). This would collect the data from the patient reports, analyze it and create a report to give to the hospital. This helped reveal the actual results of the evaluation including the effectiveness and the efficiency of the pain management.

4) an increase in the validity of the evaluation of the outcome of the pain management : the head nurses at the surgery unit did the metaevaluation via a so-called Consultant metaevaluation and provided some suggestions towards the head nurses at the patient ward according to the results of the check up on the validity of the pain management outcome evaluation on the evaluators, the procedures, the tools used in the evaluation, the interpretations and the presentation of the results of the evaluation. This would create confidence and trust in those planning to use the results of the evaluation to guarantee correctness, precision, appropriation and a wide coverage. This was going along well with one metaevaluation by Stufflebeam (2000) and an increase in the validity of the evaluation according to a suggestion by Bamberger, et al. (2006).

The conclusion and the suggestion

The prominent feature of this model was that it was finely combined with 2 concepts : a nursing one as well as an evaluating one. The object of the evaluation, the evaluators and the evaluating methods were different as

The object of the evaluation	The evaluators	The evaluating methods
The outcome of the pain management at an individual level	The patient The nurse	- Self-observation - Patient observation
The outcome of the pain management at a patient ward level	The head nurses at the patient ward	- Nursing activities observation - An audit of the patient reports
An increase in the validity of the evaluation of the outcome of the pain management	The head nurses at the surgery unit	- The check up on the validity of the evaluation (Random selection of the evaluators and the patient reports)

Moreover, the researcher considering for more support for the users of this new model created a manual book for the model and decided to verify the quality again together with setting a plan to put this model into use, after that it will be an evaluation of this new model considered the coming 3rd and 4th step.

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