Construction and Validation of an Online Course about the Nursing Care for Newborn With Hypothermia

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Objectives

- Observe and evaluate the thermal instability of these patients, as well as appropriate nursing interventions to temperature disturbances, are maintained to the reversal of this situation and fundamental to the survival of the newborn. This study aimed to construct and validate online course on nursing care for newborn infants with hypothermia.

Methods

- Type of the Study: methodological type, in which data collection was performed with seven content experts and three of appearance, from November 2015 to February 2016.

- For the construction process, we used the Digital Educational Material Development Model proposed by Falkembach (2005). This consists of five phases: Planning Phase, Modeling Phase, Implementation Phase, Evaluation Phase and Distribution Phase.

- The virtual learning environment for distribution was SOLAR 2.0, from the Federal University of Ceará. The workload was 60 hours, divided in three classes. Adapted from the newborn to extrauterine life, physiology, definition and types of hypothermia, temperature verification sites, forms of heat loss or transfer, risk factors, defining characteristics, related factors, nursing interventions and care in the Hospital transport.

- The data were analyzed according to the Content Validity Index (CVI) from considerations of experts and discussed according to the literature.

- The study followed the ethical aspects required by Resolution 466/12 and was approved by Protocol 983,137. The study was approved by the Research Ethics Committee of the Federal University of Ceará.

Results

The course content has been converted into 8 HTML pages, which were divided into 3 classes.

- Class 1: addressed the adaptation of the newborn to extra-uterine life, physiology and definition and types of hypothermia, verification local body temperature, forms of heat loss or transfer and risk factors.

- Already the class 2 stopped at the approach of defining characteristics and related factors of hypothermia.

- Class 3: nursing interventions for hypothermia, they were divided into barriers against heat loss, which are: cotton cap and polyethylene bag; and external heat sources that are: thermal mattress, Kangaroo Care, breastfeeding, neonatal incubator and heated crib.

- Moreover, in class 3 care during intra-hospital transport and extra were addressed and the “10 steps from the warm current” proposed by the Ministry of Health in order to prevent and combat neonatal hypothermia.

- We propose chats with the students, discussion with the virtual professor, and tests about the content of the course.

Conclusion

The course was a validated content with 78% agreement among experts and final general CVI of 1.00, and was validated in appearance with 88% agreement among experts and final general CVI 1.00. We conclude that the course is a valuable tool for training neonatal care nurses in the care of newborn hypothermia.