SUCCESS AND PERTINENCE OF A PILOT ACUTE PAIN MANAGEMENT E-LEARNING PROGRAM FOR NURSING STAFF

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1. BACKGROUND AND AIMS

Continuing education in pain management is an important way to increase pain knowledge, and therefore, modify the caregivers’ clinical practice. Different methodologies in continuing medical education (CME) vary from formal academic teaching to self-managed training. Obtaining e-learning technology can be an efficient method to train nursing staff since accessibility is warranted. Authority is achieved by being actor on one’s training, by auto-training, self pace, individual work and training organization, by videos which could be viewed at any time and accessed from home or work, if necessary. It also offers the possibility to interact with peers when a whole staff is requested to participate in training.

Since 2009, at the University Hospital of Vaud, a policy named “Pain management” is part of an institutional commitment to improve pain practices. In this sense, it makes that all health care professionals are accountable for pain management. To train nursing staff, a pilot e-learning program on acute pain management was created and tested in a traumatology ward.

The objectives of the training were:
- offering an attractive and relatively convenient way to get training
- responding to the needs of the caregivers
- encouraging self-recognition and autonomy
- stimulating discussions and questioning at one’s level and at the team’s level.

2. METHODS

The Continuing Education Center, the institutional Pain project manager and the nursing staff of traumatology ward were involved with the creation of the training program:
- The pilot training consists of 17 themes of 3-6 short audio commented slides (ACS) and lasting about 5 minutes each
- Training is available on an internet e-learning platform requiring a password to access
- Trainees are requested to fill in an identical quiz before and after viewing each topic to test pain knowledge
- Each quiz contains 4-6 questions, which can be answered by providing written comments, etc. and can only be filled in once
- The program is available during 2.5 months on the internet (inside and outside hospital access)
- The team training participation is voluntary but strongly encouraged
- The anonymity of answers and scores to the quiz is ensured
- Numerous meetings are held in order to announce, prepare and explain the backgrounds, goals and method of the future training, introduce and present the platform, as well as gathering comments, questions and fears.
- At the end of the training, a questionnaire to evaluate 3 main areas (usefulness of the use of the platform, ACS and quiz: topics and contents) usefulness of this type of training compared to a more traditional one is emailed to all caregivers of the ward.
- Almost one year after the end of the program, for the purpose of checking knowledge retention, participants who enrolled in the program are invited to fill in an other quiz gathering 2/3 of the previous quiz. The questions are randomly selected for everyone.

3. RESULTS

3.1 Participation rate

- 50% of the traumatology ward followed the training, which gives a 62% participation rate (n=65).
- Among these, 65% (n=34) viewed all 34 videos.
- At the one year re-test, 32 participants completed the questionnaire (participation rate 70%).

3.2 Quiz scores:

4. DISCUSSION

Regarding pain knowledge:
- The score for all the participants between pre and post quiz increased from 64% to 84%. During this period, leaders’ and trainers’ support is particularly strong and fills are also more likely to discuss together to share their points of view and seek others’ advice about pain management.
- One year after, the score of the global quiz is 66%. Although the availability of ACS was constant over the year, it appeared that no one reviewed a single ACS after the pilot period training. This, combined with the fact that long-term memory by learners was not improved, could explain that knowledge retention has decreased over time.
- Hypothesis can be made to explain variability in ACS scores: themes (less central, questions not precisely formulated or that may induce confusion, setting end time when training is performed being answered as “too much, too little, or not enough, ...)

The evaluation questionnaire reflected a high satisfaction rate about:
- the content and topics provided
- the possibility of transferring the knowledge into practice.

Participants would recommend this type of training to colleagues. They also mentioned their great interest toward an e-learning training compared to a more traditional one. They stated that the autonomy they had to perform the training was another success factor.

After the training, Traumatology team leaders noticed a better pain anticipation and pain management assessment in more patients as before, as well as the development of a more elaborate professional positioning regarding pain and pain management. A supportive clinical leadership is a key element of this program’s success.

The analysis showed some limitations to this e-learning training:
- the training is not customized to each person’s needs
- it was not possible to know the participants’ certainty level of their answers, which is an interesting element to correlate with the initial answers.
- the platform did not offer the possibility to post question on-line, nor did the training schedule a formal interactive session between participants and trainer.

5. CONCLUSION

This pilot e-learning program was very successful in terms of:
- participation
- short term knowledge increase
- participant satisfaction which was very favorable regarding easiness, transferability into practice and usefulness of this type of training.

Positive aspects of this E-learning training are:
- once it is developed, explained and given access, the program is available 24/7 to everyone who would like to re-watch videos
- the training program is easily transferable to other wards
- a supportive clinical leadership is a key element of this program’s success.

Perspectives:
- the long term score of knowledge retention was rather low. Introducing a Q&A meeting during and after the training, or at a fixed time, could also offer a new perspective to the training.
- depending on the specificities of other wards, new videos have to be developed to target other topics pertaining to their needs (chronic pain, psychosocial aspects of pain management, impact of a multidisciplinary team, pediatrics, genitourinary, drug abuse, sedated patients, etc.)...
- one could imagine that every nurse should follow this training and validate it each year.
- the high satisfaction rate encourages the continuing education center to carry on with the development of this model of training, particularly when the training is a goal is sensitization to pain management.