Examining Nurses' Knowledge and Attitudes About Pain Management Using an Online Survey

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The project was reviewed by the Network’s IRB and deemed to be QI.

Methods:

- Designing the web-based survey: The survey was comprised of the 40-item Knowledge and Attitudes Survey Regarding Nurses’ Knowledge and Attitudes About Pain Management Questionnaire (Lakey, 2001), and 10 demographic items. Items were selected using a random number generator. The survey was tested for content validity and reliability.

- Survey pilot testing: The survey was piloted with a separate group of nurses at UVM who were not part of the sample. The survey was reviewed based on pilot subjects’ feedback, resulting in the final survey. Average expected time to complete the final survey was 20 minutes.

- Procedures: To maximize the visibility of and interest in the online survey, the project team partnered with Network Nursing leadership to raise awareness of the study and encourage participation. The Nurse leaders e-mailed their nursing staff members, explaining the survey’s purpose and how results would be used; they also assured staff that participants’ responses would be kept confidential and would not affect anyone’s performance evaluations.

- Survey was pilot tested to ensure that the survey was user-friendly.

- Survey was then conducted during June through August, 2012.

- The survey was distributed to 1763 Network nurses, of whom 675 completed the entire survey (response rate = 38%).

- Most respondents believed themselves to be accountable (i.e., responsible) for basic pain management practices, including: helping patients achieve relief (n=656, 97%), assessing pain (n=656, 97%), and initiating care plans (n=463, 95%).

- However, a considerable number of nurses also felt responsible for outdated actions that are inconsistent with current pain management practices, including preventing drug tolerance to opioids (n=379, 56%), determining real versus imaginary pain (n=201, 30%), and preventing addiction (n=214, 32%).

- Items related to analgesics and to pharmacology concepts received the lowest scores.

- Our experience has demonstrated that obtaining current information about pain management-related knowledge and attitudes of in-duty nurses working in busy healthcare settings can be done efficiently and effectively using online surveys. After improving our survey processes, we plan to conduct similar surveys with other Network healthcare provider groups (e.g., pharmacists, physicians, etc.). Educational programs can then be tailored to the needs of the various provider groups.

- The response rate of 38% is lower than we had expected, yet the online methodology was advantageous for several reasons, including:

  - Quick, easy access to 1760 Network nurses, many of whom would have been challenging to reach using more traditional survey formats.

  - The financial savings of using an electronic survey format.

- There are many ways to improve the response rates for future surveys:

  - Allow project team members to directly contact nurses in order to monitor and facilitate the completion of surveys in “real time.”

  - Include more interaction between the project team and staff RNs, management, and nursing leadership in the design of the survey, and in the ongoing communication and interpretation of the project results to nurses about how to complete the survey.

  - Consider providing incentives to reinforce the importance of receiving responses from the survey recipients.

  - Improve the survey technology so that it allows for better access and improved ease of use.

  - Overcome some of the barriers that respondents encountered in completing the survey in a timely manner.

Results:

- Sources most often listed by respondents used to inform their clinical practice in managing patients’ pain:

  - Policy, provider manuals, or guidelines (n=226, 38%).

  - pain education, external web-based pain education sites, and professional pain education courses (n=226, 38%).

  -KRAMES On-Demand, a patient education system (n=72, 12%).

  - Pain education programs (n=226, 38%).

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Conclusions:

- Given nurses’ 24-hours a day presence in hospitals, nurses can be the most influential force in improving pain care and developing relevant policies to guide and improve healthcare providers’ clinical pain practices. Thus, we believe that learning about network nurses’ pain management knowledge and attitudes is a key step toward identifying nurses’ educational needs, designing relevant, focused pain management programs, and determining how to make Network pain policy and clinical guidelines useful.

- Overall, Network nurses’ survey responses indicate a fair level of baseline knowledge about general pain management topics. Pain education programs will be developed to reinforce general concepts and address depth in the pain content areas in which improvements are most needed, e.g., knowledge about the use of analgesics and about pharmacology concepts, understanding state-of-the-art principles related to addiction and drug tolerance.

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Table 1. Accountability for Pain Management

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<td>656</td>
<td>97</td>
</tr>
<tr>
<td>Preventing patients from becoming drug tolerant to opioids</td>
<td>463</td>
<td>68</td>
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<tr>
<td>Determining real versus imaginary pain in a patient who is not cooperative</td>
<td>201</td>
<td>30</td>
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<tr>
<td>Preventing patients from developing drug tolerance</td>
<td>379</td>
<td>56</td>
</tr>
<tr>
<td>Preventing patients from developing drug tolerance</td>
<td>291</td>
<td>44</td>
</tr>
<tr>
<td>Ensuring the patient is not opioid dependent</td>
<td>260</td>
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Table 2. Sources Most Often Listed by Respondents for Informing Their Clinical Practice in Managing Patients’ Pain

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<th>Source</th>
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Demographics

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<tr>
<th>Variable</th>
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<tr>
<td>Gender</td>
<td>675</td>
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Sources most often listed by respondents used to inform their clinical practice in managing patients’ pain.

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Lehigh Valley Health Network, Allentown, Pennsylvania

Background/Purpose:

- Past studies suggest that healthcare providers’ decisions about pain management are influenced more by their own attitudes and beliefs about pain than by a thorough assessment of their patients’ current issues.

- Acknowledging the well-established notion that knowledge and attitudes guide behaviors, the project team sought to examine the pain management knowledge and attitudes of nurses working in the Lehigh Valley Health Network and use the results to implement education and quality improvement (QI) initiatives to improve pain management for Network patients.

- Published literature indicates that web-based surveys offer unique advantages that more traditional survey methods lack. Thus, the project team decided to use a web-based pain management nurse survey tool.

- The theoretical framework was a healthcare network adaptation of Michael Harrison’s model of an organization as an open system, providing a broad organizational context in which pain management can be examined.

Methods:

- The project was reviewed by the Network’s IRB and deemed to be QI.

- Population and settings: The study population for the survey QI project was all registered and licensed practical nurses working on inpatient units in the Network’s three hospitals.

- Designing the web-based survey: The survey was comprised of the 40-item Knowledge and Attitudes Survey Regarding Nurses’ Knowledge and Attitudes About Pain Management Questionnaire (Lakey, 2001), and 10 demographic items. Items were selected using a random number generator. The survey was tested for content validity and reliability.

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- During the survey collection period, the project coordinator sent updates to Nursing leadership, reporting response rates of the units and answering survey-related questions. Nurses’ survey responses were captured in an Excel database. Data were analyzed in SPSS.

- The study was conducted during June through August, 2012.

- The survey was distributed to 1763 Network nurses, of whom 675 completed the entire survey (response rate = 38%).

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