

What do nurses need to know about delirium & delirium prevention?

NURS 344: Nursing Synthesis Project

The University of British Columbia

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What do nurses need to know about delirium assessment & prevention?

UBC Synthesis Project

Created for Jen Tabamo and Vancouver General Hospital (VGH)

SUMMARY: OUR ANALYSIS

- Respondents are professionally less experienced, with the majority having practiced less than 5 years as a Registered Nurse (RN) or Licensed Practical Nurse (LPN)
- Nurses struggle with managing the difficult behaviours that accompany delirium
- Burnout in caring for these patients is experienced by over a quarter of respondents
- Tools to capture delirium are not adequate, as many respondents answered that policies are unfamiliar, not user friendly or too time consuming to implement
- Suggestions on how to improve delirium are included - most notably, many nurses would prefer CAM/PRISME tools be formatted a flowsheet

WHO ANSWERED OUR SURVEY

By numbers

- 54 surveys submitted
 - 26 paper*
 - 28 online*
- Data collection period: 18 days
 - Opened 16 January 2017*
 - Closed 3 February 2017*
- Number of participating VGH units: 7
 - 4 Hospitalist Medical Units: CP7EF, CP7GH, CP8EF, CP10H*
 - 3 Clinical Teaching Units: T10CH, T11AD, T14G*

By unit

Of the 54 surveys collected for this study, 27.78% of the data collected came from the Acute Medical Units T10C and T10H for a total of 15 surveys (12 of these surveys were filled out by RNs and two were filled out by LPNs; one unknown). 31.48% of the surveys came from Acute Care of the Elders (ACE) units 11A and 11D, accounting for 16 surveys (15 by RNs; one by an LPN). CP8E and F (ACE units) submitted 14.81% of the surveys collected, accounting for eight surveys (five by RNs; three by LPNs). Respondents on the General Medical Unit on T14G turned in six surveys, which was 11.11% of those collected (5 by RNs; one by an LPN). CP7E and F (General Medical Units) filled out 9.26% of the surveys, accounting for five surveys (three by RNs; two by LPNs). Two surveys were collected from CP10H (General Medical Unit), which accounted for 3.70% of the surveys (both by RNs). CP7GH (General Medical Unit) submitted one survey, or 1.85% of all surveys collected (by LPN). Although this survey asked respondents to indicate the unit that they **most** often work, some marked multiple units. In these cases, only one unit was recorded to ensure consistency throughout responses.

By professional licensing and employee status

A majority of respondents are RNs (n=42, 22%) and LPNs (n=12, 22%) with 36 of the 54 people surveyed (70.59%) indicating they were full time employees. Of full time employees, most nurses (33.33%) work on ACE units T11 A & D and indicated a full time status, while 27.78% of nurses work on Acute Medical Unit T10 C & T10H indicated a full time status, 16.67% work on hospital

medical unit CP8E or CP8F and indicated a full time status, 11.11% came from the general medical unit T14G who are full time, 8.33% came from the hospital medical unit CP7E or CP7F and are full time, and lastly, 2.78% full time nurses came from hospital medical unit CP10H for a total of 36 full time employed nurses.

The remaining 11 of the 54 respondents (21.57%) indicated they were part-time nurses (71% RNs; 29% LPNs). 7.84% of surveyed nurses reported working as casual employees.

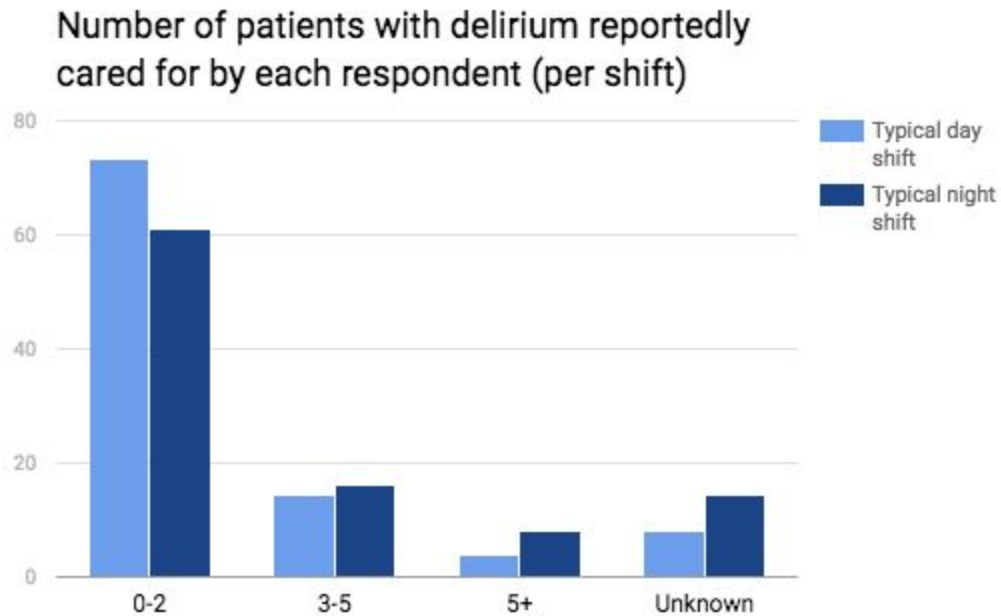
At the time of survey, 3.85% of respondents were under 25 years of age, 40.38% were 26-35 years of age, 26.92% were 36-45 years of age, 25% were 46-55 years of age and 3.85% were over 55 years of age.

By clinical & educational experience

Regarding formal education, most of the respondents (41.67%) mentioned they learned about delirium through nursing school, 35.42% through in-services, 20.83% through workshops, 4.17% through seminars and 2.08% learned through online information. Feedback showed that some nurses have had long gaps between education, and one nurse stated “information did not stick” that was presented some time ago. Based on some of the comments, nurses might like more educational opportunities on their units. 14.58% did not indicate where/if they had received any formal education on delirium.

Most survey respondents (40.38%) have less than five years of professional nursing experience, 20.85% have five to ten years experience, 19.23% have 11-20 years of experience and 11.54% have 21 years or more of professional nursing experience. Approximately one nurse on T11A and T11D (the ACE units) and T14G (the general Medicine unit), CP7E and CP7F and CP8E and CP8F had more than 21 years of experience.

BASELINE KNOWLEDGE: HOW ARE NURSES CURRENTLY DOING?



Knowledge-based responses

Overall, over 90% of nurses seem to grasp risk factors, symptoms and identification of delirium in patients. Nurses expressed less understanding of the downstream and contextual effects of delirium.

93.88% of nurses correctly answered that involvement of family/visitors is not a risk factor for delirium. All nurses recognized that use of tubes and catheters is a risk factor for delirium.

93.62% of nurses (including 100% of LPNs) correctly identified hyperactive delirium symptoms as both 'Attempts to remove catheters or IV lines' and 'Vocally disruptive behaviors'. Both incorrect responses involved selecting only one (rather than both) correct option. Zero nurses selected incorrect choices of 'Apathy' or 'Lethargy'.

Hypoactive delirium was correctly identified as 'Withdrawal', 'Flat affect' and 'Apathy' in 93.75% of responses. One respondent answered only 'Withdrawal' and one respondent answered only 'Flat affect'. One respondent provided the incorrect answer 'Restlessness'.

79.17% of nurses correctly identified that delirium in the hospital is not associated with ‘Slow progressive onset of disturbance’. Five nurses (9.3%) did not believe delirium is associated with ‘Development of multiorgan dysfunction’. Four nurses (7.4%) did not believe delirium is associated with ‘Higher cost of care’. One nurse did not identify increased mortality as associated with delirium in hospital (1.9%).

Delirium interventions

A majority of nurses (%) feel that treating underlying infection (69.39%) and improving pain control (55.10%) are always effectively used for managing delirium in the hospital.

Nurses (%) feel that antipsychotic medications (41.67%) and orientation strategies (34.69%) are sometimes effectively used for managing delirium in the hospital.

Nurses had less confidence in the use of restraints with 42.86% of nurses reporting that restraints (when indicated) are rarely effectively used for managing delirium in the hospital.

65.30% of nurses feel that ensuring ability aids are in place is often and always effectively used for managing delirium in hospital.

Relative to other responses, most nurses responded that they always feel the following metrics are effective for managing delirium in hospital: assigning consistent nurses/caregivers (34.69%), promoting/assisting with ambulation as clinically appropriate (38.78%), decreasing stimulation for hyperactive delirium (40.82%), and psychosocial interventions (44.90%).

DO NURSES HAVE ADEQUATE KNOWLEDGE AND UNDERSTANDING OF DELIRIUM POLICY, CAM SCREENING AND PRISME TOOLS?

In this section, we are looking at the nurses' familiarity with the VCH policy on delirium as well as some of their current practices around the detection and management of delirium. The majority (76.5%) of the respondents strongly agree that delirium is a medical emergency. In terms of using the tools that are currently in place to detect and manage delirium, 50% of the nurses feel neutral about the CAM and PRISME tools' efficiency. Only 21.5% of the nurses strongly agree that a VCH policy exists for detection and management of delirium. The level of confidence towards the VCH policy is demonstrated by 49% of the nurses agreeing and strongly agreeing that they feel confident in executing the delirium screening algorithm as per VCH policy. Almost half (49%) of the nurses strongly agree that they currently screen patients for delirium only when they present with symptoms. Finally, 24% of these nurses disagree that all patients should be screened for delirium once per shift as per the VCH policy.

WHAT ARE THE GAPS, AREAS & CHALLENGES VGH CAN IMPROVE?

In this section, we capture the perceived incidence of delirium on the specific units that we studied as well as gaps and challenges present in current practices around detection and management of delirium. A high number of respondents (96%) have answered that they are sometimes, often or always working with patients experiencing delirium. On the other hand, 32% of nurses never or rarely review the VCH policy on delirium to ensure that their practice reflects the policy. At shift handover, about a third (31%) of the nurses communicate care plans for patients with delirium. When noticing changes in patients' cognition, 46% of the nurses have assessment for delirium as their first goal, and half of respondents (50%) contact a physician immediately when they suspect delirium in a patient. Finally, 8% of the nurses that responded to our surveys do not know where to find the appropriate tools to screen and treat their patients with delirium whereas 74% of the nurses expected to consult the VCH Intranet to locate the tools they needed to screen and treat patients experiencing delirium as per the VCH policy.

OPEN-ENDED QUESTIONS: ANALYSIS

‘What about delirium do you find most challenging?’

Pulling^{Hard} Behaviour Restraints Manage Risk

Care^{safety} Delirium^{Baseline} Causes

Consuming Treat Behavior

There were several key themes highlighted as challenging regarding delirium in patients. Nurses expressed they struggle with managing the difficult behaviours that patients exhibit while in a state of delirium. Many identified that the high needs of these patients is causing some level of nursing burnout, both physical and emotional. The other key finding was around the etiology of those patients exhibiting symptoms of delirium. Nurses expressed that it is challenging to identify which symptoms are associated with a differential diagnosis (such as dementia), or to find the underlying cause of the symptoms of delirium. The subjective data submitted by the survey participants were analysed in text and divided into 12 categories. Below are the key findings of the most frequent responses:

About a third (30.95%) of nurses identified difficult behaviour as a major challenge in serving this population. Key examples of “difficult behaviour” included pulling out IVs/catheters, trying to climb out of bed, calling out, aggression, agitation, combative and resisting care.

Over a quarter (26.19%) of nurses expressed some form of burnout in caring for patients with delirium. Examples of burnout included frustration with managing difficult behaviours, struggling with nursing ratios and the management of more than one patient with delirium on an assignment as well as moral distress, particularly with the use of restraints. Nearly one-fifth (19.05%) of nurses felt there was not adequate time to effectively manage patients with delirium (time for therapeutic communication, detailed assessments and managing behaviours).

Another 23.81% of nurses struggled with ruling out a differential diagnosis such as delirium to be the cause of the symptoms of delirium, while 14.29% reported that not knowing a patient's baseline was a contributing factor to uncertainty in suspecting delirium. Furthermore, 14.29% of nurses expressed not knowing the cause of the delirium was particularly challenging.

‘What do you think would improve recognition and management of delirium in the hospital?’

Screening_{In-services} Family_{CAM} Education

Sheet_{Delirium} Flow_{Patients} Form_{Staff}

The two most common themes for this question were around education and the development of an assessment tool. Education was requested about delirium itself as well as regarding the tools used to screen and manage delirium. Many nurses felt that the development of a tool would be effective in improving recognition and management of delirium. Subjective responses to this question were analysed in text and divided into 17 categories for evaluation. The most common themes are explored below:

Over half (51.22%) of nurses requested further education around delirium and 29.27% requested further education around the tools used to assess and manage delirium. For statistical purposes, nurses who made general requests for “education” were added to both the “general delirium education” and “tool education” categories. Examples of education that was requested included information on “the types and depth of delirium,” having regular training sessions for nursing, physicians and PCAs, including training about delirium during orientation of newly hired nurses, reviewing case studies with the leadership team and explicit review of the tools used at VGH to screen/manage delirium.

26.83% of nurses felt that the development of a flowsheet would improve the recognition and management of delirium. Some felt that a daily flow sheet would be particularly useful. Other recommendations included a pocket tool, visible signage with a simple acronym on the units and an algorithm.

RECOMMENDATIONS: MOVING FORWARD WITH THE CAM/PRISME

The majority of nurses feel they could benefit from additional delirium resources, including standing orders for delirium and more explicit instructions for CAM and PRISME. Notably, responses indicate the nurses may be receptive to a flowchart version of the CAM, perhaps formatted similarly to the CIWA or hypoglycemia protocol. Nurses also report they might conduct more regular delirium screening if the CAM was included as a tick box on head-to-toe flowsheets.

67.35% of nurses indicated they feel standing orders for delirium would be a useful clinical tool. 2 respondents disagreed with this statement.

54% of nurses would be more inclined to use CAM/PRISME if they were formatted differently, while 40% indicated they were unsure. Among nurses who agreed with this statement, alternative preferences included flowchart (64%), color-coded sections (36%) and less text/more white space (28%). ‘Other’ responses included formatting CAM/PRISME similar to the CIWA or the hypoglycemia protocol. One respondent suggested “simply making it easier to check off the correct corresponding symptom (currently there is, for example, one box that could represent 3 different questions)”.

64% of nurses would be more inclined to perform regular delirium screening if a CAM tick box was included on daily head-to-toe flowsheets.

80% of nurses would like more explicit instructions for the CAM and PRISME tools.

NB: Refer to addendum ‘Final Delirium Synthesis Survey Responses’ for data summaries by question

----- **END OF ANALYSIS** -----

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