Article: Predicting inpatient delirium: The AWOL delirium risk-stratification score in clinical practice

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Tamica Ivey

Olivia Suresh

Alicia Mcgraw

I. Introduction
   A. Assessing for delirium is important because:
      1. Delirium affects the way a person thinks, increases prevalence of falls, and decreased awareness of the environment.
      2. The high frequency of delirium as a complication of inpatient hospitalization, as high as 30%
      3. Safety and Prevention is key when a person becomes at risk from experiencing delirium.
   B. and efficient delirium risk prediction is an important step of any multicomponent approach to treating delirium as a complication of inpatient hospitalization.
      1. Implementing the AWOL score in clinical practice
         a. Easy, brief cognitive screen
         b. Delirium care pathway
         c. Delirium prevention care plan
      2. Efficacy of AWOL score in detecting delirium
         a. AWOL scores
            1. Sensitivity & specificity (*refer to TABLE 1)*
         b. Limitations
            1. Language barriers
            2. Aphasia

II. Purpose - To study the performance of risk stratification using the AWOL score, a validated delirium prediction rule, as a part of a multidisciplinary care pathway tool in clinical practice.

III. Methods

A. The study was conducted as a retrospective cohort study that took place at the neuroscience's unit at the University of California San Francisco Medical Center
B. The study took place between April 1st 2014 and March 31st 2015.
C. Evaluated subjects by:
    1. Sample size
        a. 50 years & older
        b. Severity of illness
            - not, mildly, moderately, severe
    2. Random Selection
    3. Prevalent vs. Incident
    4. AWOL score
        - 0 – 4
D. AWOL score of greater than 2 considered delirious

IV. Results

A. Out of a total of 800 admissions randomly selected, 747 were able to be reviewed.
    1. Of the patients with an AWOL score calculated and documented, 69 (19.9%) had delirium at some point during their hospital stay
    2. 49 out of 69 had prevalent delirium and 20 developed incident delirium
    3. 5.45% of patients had a score of 0, while 60.5% with a score greater than 2
    4. After the removal of prevalent delirium, 3.11% of patients with a score of 0 became delirious, and 25.0% of those scoring higher than 2 became delirious
B. The results indicate that regardless of the presence of delirium upon admission or not these patients' experienced delirium at some point in the hospital stay
C. TABLE 1
    1. The chart below shows the sensitivity (the ability to designate a disease as positive) and specificity (the ability to designate a disease as negative). PPV (positive predicting values) shows what the researchers predicted the sensitivity to be compared to the NPV (negative predicting values). These values show that the sensitivity of the risk for delirium was higher than what they predicted, and the specificity was lower than predicted.

	Sensitivity	Specificity	PPV	NPV
All delirium	66.7%	89.2%	60.5%	91.5%
Incident	50.0%	89.2%	25.0%	96.1%

delirium only				

D. TABLE 2

AWOL scores, incident, and prevalent delirium

Chart indicates that in 69 patients' delirium was indicated at some point in their hospital stay.

AWOL score	Not delirious n (%)	Delirious n (%)	Total
0	156 (94.5)	9 (5.45)	165
1	92 (86.6)	14 (13.2)	106
2	21 (60.0)	14 (40.0)	35
3	7 (21.9)	25 (78.1)	32
4	2 (22.2)	7 (77.8)	9
Total	278 (80.1)	69 (19.9)	347

V. Conclusion

1. Use of the AWOL score found to be very helpful in detecting risk for delirium early in patients
2. The AWOL score was easily incorporated into day-to-day clinical assessments.
3. The AWOL score has been successful at detecting the presence of delirium and designating patients into low or high risk.
4. Early detection assisted implementation of non-pharmacological interventions.
5. By implementing this into future clinical practice will assists nurses in becoming much more aware of the risks sooner and implementing interventions faster.

References:

Brown, E. G., Josephson, S. A., Anderson, N., Reid, M., Lee, M., & Douglas, V. C. (2017). Predicting inpatient delirium: The AWOL Delirium Risk-stratification score in clinical practice. *Geriatric Nursing*, *38*(6), 567–572. https://doi.org/10.1016/j.gerinurse.2017.04.006