Using the Cornell Assessment of Pediatric Delirium (CAPD)

Permissions and Costs

The CAPD is available for use without cost, and the author will grant permission to use the measure to anyone with the appropriate training and context to administer the measure. For graduate students and their advisors, this document is the permission to use the measure in dissertation or other program requirement research.

Delirium

The CAPD was designed and validated with experienced nurses who underwent training regarding the use of the tool to observe and rate the behavioral changes which may be present in children with delirium. They were trained to relate them to normative developmental stages in children through the use of the accompanying CAPD Developmental Anchor Points chart. Any use of the measure requires an understanding of child development and how this is reflected in child behavior in the PICU. It is not appropriate to use the CAPD without this understanding. It must be completed as a scoring outside of normative behavior as completing it with "sometimes" for all categories will give the child a positive score. For specific questions on this issue refer to the discussion in the DSM-IV/V regarding diagnosing delirium, or in dialogue with Drs. Silver, Traube and Kearney.

There is some controversy about whether one can diagnose delirium in preverbal, or non-verbal children. We have shown that it is possible to diagnose as long as one is informed about normative child behaviors, experienced with sick children and is properly trained in the use of the CAPD. Researchers should be aware that without the appropriate preparation nursing staff may not complete the instrument appropriately.

The appropriate time frame

The CAPD was designed and validated with the expectation that it would be completed by two nurses covering the 24 hours of the day (i.e.: half-way through the 12 hour day shift, and half-way through the 12 hour night shift) in order to capture the expected waxing and waning fluctuating course of delirium. Any change in this schedule makes the data collected not comparable to those collected with the standard schedule. Thus, such a change is not recommended.

Should a researcher decide to do so anyway, she or he should be aware that any report of the research should clearly disclose this, and that this deviation may affect reliability and validity of the CAPD.

Modifications of the items

Any modification to the item wording, order, content, punctuation, etc. renders comparisons of the data collected using such a version problematic, and without further study, problematic in unknown ways. Should a researcher decide to do so anyway, she or he should be aware that any report of the research should clearly disclose that a non-standard modified version of the measure was used and that no reliability or validity data exist for this new, non-standard measure. If there are other data in papers that used the identical modification, the researcher is, of course, free to cite those papers as evidence in support of the characteristics of this modified measure.

Use with adults

The CAPD was neither developed nor validated with adults. It is validated for children from birth to 21 years. Any use in adults over 21 would be use with no current reliability or validity data.

Cutting scores, cut-offs, and categorical uses

"Cut-off" score for the CAPD has been found to be 9 based on our validation study; further multi- site data may be needed to ascertain that this is the best cut-off score. The CAPD is intended to be a screening tool for nursing staff in the Pediatric Intensive Care Unit (PICU) to identify children who require further evaluation. The CAPD was not intended to be used as a proxy for a diagnosis of delirium.

Differential diagnosis and scoring

The complicating factors for critically ill children being cared for in the PICU include the underlying medical illness, sedation and analgesia, and pain. We would expect each of these situations to cause nurses to score positively some of the CAPD questions but it should not raise the score to significance (>9) in that a child may be irritable and mildly agitated from an uncomfortable illness, or suffering pain leading them to be irritable but not sedated, or sedated and difficult to rouse but not disoriented. Therefore, the scoring should not be overly inclusive of the average PICU patient.

Translations

There has been international interest in the CAPD by scholars suggesting that it will be translated into other languages. We would like to be involved in any translation process as the wording of the questions is important in the interpretation and scoring by nursing staff. Translation of the anchor points chart would be a necessary part of the process. We request a copy of any translation and any associated citations.

Citations

Cornell Assessment of Pediatric Delirium: A Valid, Rapid, Observational Tool for Screening Delirium in the PICU. Traube C, Silver G, Kearney J, Patel A, Atkinson TM, Yoon MJ, et al. *Critical Care Medicine*. 2014 Mar;42(3):656–63.

Detecting Pediatric Delirium: Development of a Rapid, Observational Assessment Tool. Silver, GS, Traube C, Kearney JA, Kelly D, Yoon M, Nash Moyal W, Gangopadhyay M, Shao H, Ward MJ. *Intensive Care Med.* 2012 June; 38(6): 1025 – 31

Contact Information:

Gabrielle Silver, MD
Assistant Professor of Psychiatry
Director of Pediatric Psychiatry Consultation Liaison Services
Department of Child and Adolescent Psychiatry
NYP Weill Cornell Medical College
Box 140
New York, NY 10065

(212) 746-3864 tel (212) 746-5944 fax

ghs2001@med.cornell.edu

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