

MONA PAPER OF THE MONTH - JULY 2019

Overview, Catherine Monk, PhD

Agreement Between Prospective and Retrospective Measures of Childhood Maltreatment: A Systematic Review and Meta-analysis

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The problem: Child maltreatment (CM) is a significant risk factor for future mental health issues. CM is typically assessed through retrospective or prospective approaches (e.g., use of protective services, hospital records). For example, in research, retrospective reports are used to understand the consequences of CM without the cost and time burden of longitudinal studies. Clinicians use retrospective reports to understand contributing factors to mental illness. Public health professionals rely on retrospective reports to estimate the health burden related to CM exposure. But do the prospective and retrospective measures of CM identify the same people? That is, in studies that measure CM both retrospectively and prospectively, is there agreement in who is identified as having been exposed to CM? And if there is not, the two measurement approaches cannot be viewed interchangeably to identify health risk associated with CM. Moreover, consideration will need to be given to the possibility that mechanisms underlying the associations of retrospectively identified CM with mental illness risk may differ from those underlying the association between prospectively measured CM and mental health problems.

The Study: This is a systematic review and meta-analysis conducted following PRISMA and MOOSE guidelines. 7279 studies were originally identified as fitting broad criteria for review, yet number was reduced to 16 studies containing paired data of prospective and retrospective data collection on CM. These 16 studies included 25741 unique individuals, 52% female. Because the raw percentage of agreement between prospective and retrospective reports can be inflated by chance concordance, the authors also used Cohen's Kappa coefficient to calculate agreement between measures. CM included: sexual abuse, physical abuse, emotional abuse, neglect, separation from parent, and overall child maltreatment.

The Findings: On average, 52% of individuals with prospective observations of maltreatment did not retrospectively report it, and 56% of individuals retrospectively reporting maltreatment did not have concordant prospective observations. Considered using Kappa statistics, a model of the 16 studies based on any measure of maltreatment revealed that the agreement between prospective and retrospective measures of childhood maltreatment was poor, with $\kappa = 0.19$ (95% CI, 0.14-0.24; $P < .001$; $I = 93\%$). Broad measures of childhood adversity or maltreatment showed the strongest agreement, whereas measures of emotional abuse or neglect showed the weakest agreement; agreement for specific, clear cut CM such as parental loss was high. Retrospective assessments relying on interviews versus questionnaires had higher concordance with prospective reports. Gender, age of reporting, and other participant characteristics did not moderate the findings.

Comments: The authors consider many possibilities for the low correlation between prospective and retrospective data on CM, such as various motivations not to disclose what happened in the past, including effective therapy helping put the issues to rest, as well as memory retrieval problems, or encoding problems at the time of the CM. They explicitly point out that their findings do not necessarily challenge the validity of retrospective reports of CM as those obtained prospectively may have a higher threshold for ascertainment (i.e., if based on documented abuse reports) and thus lower sensitivity versus what is obtained via retrospective reports of CM. That the weakest concordance was for emotional abuse and neglect is not surprising as these are the hardest to objectively measure (and most often do not get recorded in legal or medical records). On the one hand, the validity of what, if any, CM happened, of course 'matters', on the other, to help patients, their perceptions of experiences, whether largely overlaid with their subjective impressions, is the material available, and essential, for productive clinical work. From a research perspective, these findings raise key issues regarding how we assess CM, and consider its contributions to risk for psychopathology.