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OUTCOME REPORTING HETEROGENEITY IN GASTROSCHISIS RESEARCH - A SYSTEMATIC REVIEW

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Aim: The aim of this work was to identify which outcomes are currently investigated in gastroschisis research, and make an assessment of the quality of their reporting.

Methods: A systematic review was conducted according to a pre-specified protocol (CRD42015025026). Titles were eligible for inclusion if they compared two methods of visceral reduction and defect closure in infants with gastroschisis. Studies were excluded if they only reported outcomes from one intervention without a comparator. Assessments of eligibility and extraction of data were carried out by two researchers working independently.
Primary outcome:

- Identification of outcomes reported by eligible studies

Secondary outcomes:

- The median number of outcomes reported per study
- The percentage of studies meeting Harman et al's criteria for transparent outcome reporting
- The percentage of studies fully reporting data for every outcome they investigated.

Main Results: The search retrieved 211 unique titles related to gastroschisis. 30 were deemed eligible for inclusion in the review. Within these 30 studies, 62 unique outcomes were investigated. Only three outcomes were investigated in more than 50% of eligible studies - length of stay (24 studies, 80%), mortality (19 studies, 63%), and development of necrotising enterocolitis (16 studies, 53%). Thirty-one outcomes(50%) were only investigated once. The median number of outcomes reported per study was 9(IQR5-11).
Three studies were only available as abstracts and therefore excluded from data reporting assessments. None of the remaining studies met all criteria for complete data reporting, and 12 (44%) fully reported data for every outcome measure they investigated.

Conclusion: The need for a core outcome set in gastroschisis is highlighted by the substantial outcome reporting heterogeneity and significant risk of reporting bias demonstrated in this review. The outcomes identified in this review could be used in a robust Delphi process involving patients, parents and clinicians to develop such a core outcome set.