**Title**: The Gastric Distress Questionnaire: Initial Validation of a Screening Tool for Gastric Pain in People with IDD

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**Introduction**: Health inequalities faced by people with intellectual and developmental disabilities (IDD) have been a known issue and cause of concern for many decades (Emerson et al., 2011). One oft cited barrier to good healthcare is a lack of appropriately adapted and validated tools to support diagnosis (Malviya et al., 2005; Lewis et al., 2017). Gastric issues, such as reflux, are often treatable but frequently go undetected in people with IDD, despite this group being at a higher risk of experiencing them (Haveman et al., 2010). The current study utilizes an existing dataset to explore the validity of the Gastric Distress Questionnaire (GDQ; Oliver & Wilkie, 2005), an observer report measure designed specifically for people with IDD, which could be a useful clinical screening tool to support the diagnosis of gastric health problems.

**Method**: The data for this analysis come from a longitudinal series of surveys which first started data collection in 2003. Parents and carers of people with neurogenetic syndromes, and those with idiopathic ID or autism, completed a series of carer report measures including the GDQ and a questionnaire on current and historical health problems. GDQ scores were compiled and compared against reported GI problems.

**Results**: After excluding participants with incomplete data, a total of n=1644 participants were included in the analysis (63% male; age M = 16.63, SD = 11.14). A one-way ANOVA indicated significant differences in the GDQ scores of those participants reporting no, mild, moderate, or severe GI issues in the last four weeks (F (3) = 59.34, p < .001). ROC analysis demonstrated that the GDQ score provides a fair level of accuracy at distinguishing those with GI problems from without (AUC = 0.69, p < .001, 95% CI [0.67, 0.72]).

**Discussion:** The GDQ offers potential clinical utility as a screening tool to identify when someone may benefit from further diagnostic assessment for gastric health problems. As the measure asks about observable behaviour without the need for self-rating of pain, it is particularly well suited to supporting the health care needs of people with minimal verbal communication. These findings are supported by a small clinical validation study which yielded promising results when comparing parent reported GDQ scores to diagnostic outcomes in children with IDD referred to a specialist Gastroenterologist.

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