Assessing the reliability and validity of a questionnaire on knowledge, perceptions, and practices regarding hand, foot and mouth disease (HFMD) among Malaysian parents: A pilot study

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ABSTRACT

Introduction: Hand, Foot and Mouth Disease (HFMD) is a common viral infection that primarily affects young children under 5 years old. The disease can spread rapidly through close contact, making it crucial for parents to have adequate knowledge and adopt appropriate preventive measures. To address this gap, a comprehensive questionnaire was developed to evaluate knowledge, perceptions and practices related to HFMD among Malaysian parents. Before conducting the main study, a pilot study was deemed necessary to assess the feasibility, reliability and validity of the questionnaire. Objective: The primary objective of this pilot study was to determine the reliability and internal consistency of the questionnaire items, ensuring they effectively measure the intended constructs related to HFMD. Materials and Method: This study involved 38 parents who provided informed consent to participate. Data were collected using a structured questionnaire, which was subsequently analysed for reliability using Cronbach's Alpha via SPSS software. Each domain of the questionnaire; knowledge, perception and practice was analysed separately to derive Cronbach's Alpha values, with a minimum acceptable threshold set at 0.7 for reliability. Results: The analysis revealed varying levels of internal consistency across the domains. The knowledge section, consisting of 20 items, yielded a Cronbach's Alpha of 0.638, indicating moderate reliability. Notably, three items were excluded due to zero variance, while the perception section achieved a high reliability score of 0.797, demonstrating strong internal consistency. The practice section also showed good reliability with a Cronbach's Alpha of 0.747. Conclusion: The findings suggest that while the knowledge section requires refinement, the overall instrument shows promise for further research into HFMD awareness and prevention among Malaysian parents.