

The first step towards standardizing paediatric terminology in Australia: A systematic review

Clark, R^{1,2}, Locke, M^{1,2,3}, Bialocerkowski, A^{1,2}

¹ Menzies Health Institute Queensland, Griffith University, Gold Coast

² School of Allied Health Sciences, Griffith University, Gold Coast

³ Movement Solutions, Coorparoo

Questions: What paediatric terms and age definitions are used within the Australian health and health education context? Is Australian paediatric terminology comparable to existing US models? What is a suggested standard paediatric terminology framework for use within Australia?

Design: Systematic review using a novel domain-specific hierarchical method to review grey literature and Australian health and health education websites published from 2009 to 2014.

Participants: Australian health and health education webpages.

Outcome Measures: Paediatric terms with an associated age range definition.

Results: 1794 identified paediatric terms, reduced to 34 common terms, showed a Pareto language distribution (21% terms, accounted for 72% of cumulated terms). When combined with an age range, we identified 197 unique definitions. Paediatric terminology was inconsistent with semantic ambiguities, (19 terms with multiple definitions), and lexical ambiguities, (129 definitions with multiple terms). Age definitions were clustered into four statistically significant groups ($F = 245.3, p < .001$).

Conclusion: No standard set of Australian paediatric terminology exists, with ambiguous terms and definitions identified within Australian health and health education websites. Ambiguities were resolved based on age definitions from a decision tree analysis combined with high frequency terms from the Pareto language distribution. Comparison to an existing US model suggests Australian paediatric terminology require broader age definitions. We recommend the following paediatric terms and definitions: “infant: 0 up to 1 year”, “early childhood: 1 up to 5 years”, “child: 5 up to 13 years”, “young person: 13 up to 22 years”.

Key Practice Points:

- No consistent use of paediatric terminology within Australian health and health education exists.
- We recommend using “infant: 0 up to 1 year”, “early childhood: 1 up to 5 years”, “child: 5 up to 13 years”, “young person: 13 up to 22 years” until further work refines paediatric terminology.
- Using a standard paediatric terminology will improve future research translation to strengthen assessment and intervention studies.
- Other nations can use this innovative method to explore paediatric terminology before developing international standards.