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Prevalence of communication impairment in Australian children

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Introduction

Information regarding the prevalence of communication disorders is important for planning and evaluating service delivery. Multiple studies have investigated the prevalence of communication disorders in Australia and throughout the world, with varying results. This poster provides information from five large scale Australian studies **published since 2000**, that examined the prevalence of communication impairment in a total of 57,717 participants. The studies reported a range of estimates of prevalence rates, from 0.12% (voice) to 25.2% (expressive speech and language). Results varied according to the communication disorders being investigated, definition of disorders, mode of identification, age and number of participants.

Craig Hancock, Tran, Craig & Peters (2002)

Area(s) assessed = Stuttering
Prevalence = 0.72% overall, 1.44% males aged 6-10 years
Age of participants = 1-99 years
Number of participants = 12,131
Assessment method = Telephone interview and tape recording
Additional information

- Participants were selected from telephone directories to obtain a random, stratified sample of families from suburban (75%) and rural (25%) areas in the Australian state of New South Wales.
- All participants were contacted by telephone, given a standard definition of stuttering, and asked to identify any members of the household who may stutter.
- If a family member was reported to stutter, that person's speech was tape-recorded over the telephone for up to 5 minutes.
- Frequency of stuttering (%SS) and speech rate (SPM) were then determined from this tape-recording.

Keating, Turrell & Ozanne (2001)

Area(s) assessed = Talking, producing sounds and stuttering
Prevalence = 1.7% overall, 7.4% males aged 5 years
Age of participants = 0-14 years
Number of participants = 12,388
Assessment method = Parent report in face-to-face interview
Additional information

- This study utilized data from the 1995 Australian Health Survey collected by the Australian Bureau of Statistics (1996).
- Parents were asked to identify specific medical conditions that children were experiencing at the time of the interview, then shown prompt cards with commonly occurring long-term conditions, including "speech impairment."
- Those who responded positively were asked for additional information to clarify the nature of the speech difficulty.

McKinnon, McLeod & Reilly (2007)

Area(s) assessed = Stuttering, voice and speech
Prevalence = 0.33% stuttering, 0.12% voice, 1.06% speech
Age of participants = Kindergarten – Grade 6 (primary school)
Number of participants = 10,425
Assessment method = Teacher report followed by direct assessment
Additional information

- Participants in the study were all the children attending 36 *primary* schools in one Catholic diocese in Sydney, Australia.
- Teachers were provided with definitions to assist their identification of specific subtypes of communication impairment.
- Children identified by teachers were then assessed by a SLP.

McLeod, Harrison, McAllister & McCormack (2007)

Area(s) assessed = Communication impairment
Prevalence = 25.2% expressive speech and language, 9.5%; receptive language (parents); 22.3% expressive language, 16.9% receptive language (teachers)
Age of participants = 4-5 years
Number of participants = 4,983 (parent report); 3,276 (teacher report)
Assessment method = Parent interviews and teacher questionnaires
Additional information

- This paper utilized data from the Longitudinal Study of Australian Children (LSAC) that examined the development and wellbeing of children in Australia and the impact of a range of social and cultural factors (AIFS, 2007).

McLeod & McKinnon (2007)

Area(s) assessed = Communication disorders
Prevalence = 13.04% (wave 1); 12.40% (wave 2)
Age of participants = 5-18 years; Kindergarten – Year 12
Number of participants = 14,514 (wave 1); 14,533 (wave 2)
Assessment method = Teacher report followed by direct assessment
Additional information

- Participants were students at all Catholic *primary* and *secondary* schools in one Sydney diocese. Data were collected in two waves, two years apart.
- Teachers were provided with definitions of various areas of learning need and asked to identify children with these needs. These children were then assessed by relevant professionals including SLPs.
- Communication disorder was the second most prevalent identified area of need behind specific learning difficulty and was more prevalent than ESL, behavioural/emotional difficulty, early achiever/advanced learner, physical/medical disability, intellectual disability, hearing impairment, and visual impairment.
- The male:female ratio for communication disorder was 1.89:1 (wave 1) and 1.87:1 (wave 2).

Conclusion

Comparisons between studies are influenced by differences in study design (Blum-Harasty & Rosenthal, 1992). The current paper demonstrates that there are differing definitions of communication impairment and differing emphases on sub-types of communication impairment such as speech sound production and language. Additionally, the studies employed different data collection techniques (e.g., parent report, teacher report, direct assessment) that can affect the ascertained prevalence figure. Over the years multiple studies have been conducted that investigated the prevalence of communication disorders in Australia and internationally. Law et al. (2000) provided a systematic review of the prevalence and natural history literature published between 1967 and May 1997, covering studies investigating speech and language delays in children aged 16 years and younger. They found median estimates of prevalence ranged from 2.02% to 19% for language delay only, and from 2.3% to 24.6% for speech delay only, while estimates of prevalence for speech and/or language delay ranged from 4.56% to 19%. The five studies outlined in this poster add new information to the prevalence literature. Based on these recently conducted large-scale Australian studies the prevalence of communication impairments in Australian children ranges from 0.12% to 20.8%, with increased prevalence in younger children.

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