14th International Conference on Sustainable Development, 9-10 September 2026 Rome, Italy
https://ecsdev.org

SECURING HUMAN CAPITAL TOWARDS EQUITY: SOCIAL DETERMINANTS AND PROTECTIVE FACTORS OF SPEECH-LANGUAGE DELAY IN MALAYSIA

Authors: Basirah Anati BASARUDDIN[1], Dalila ROSLAN[1*], Nik Nairan ABDULLAH[1], Meram AZZANI[1], Noramira ABDUL KADIR[2]

1 Department of Public Health Medicine, Faculty of Medicine, Universiti Teknologi MARA; 2 Department of Otorhinolaryngology, Hospital Melaka, Ministry of Health Malaysia.
**Corresponding author:*
drdalilaroslan@gmail.com

INTRODUCTION

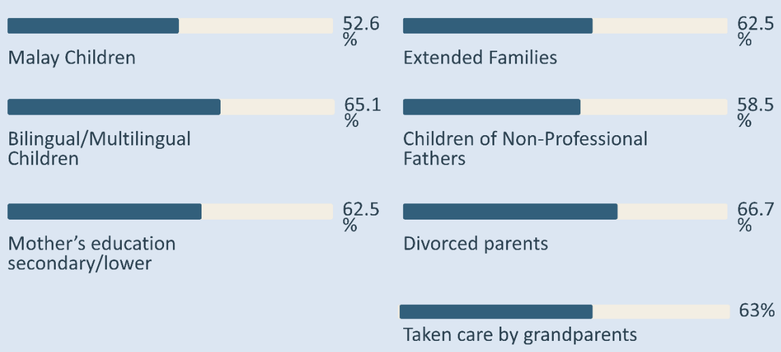
- Speech and Language Delay (SLD) is a fundamental indicator of child health, but untreated SLD persists into adulthood, negatively affecting academic performance, psychosocial well-being, and future human capital.
- Despite national overall developmental delays rising from 2.8% to 7.4% (NHMS 2022), local clinical evidence regarding the social, environmental, and healthcare-related factors influencing SLD remains limited.
- Aim: To determine the prevalence and associated factors of SLD among children aged 1–12 years at tertiary hospital's Speech Therapy Clinic in 2023.

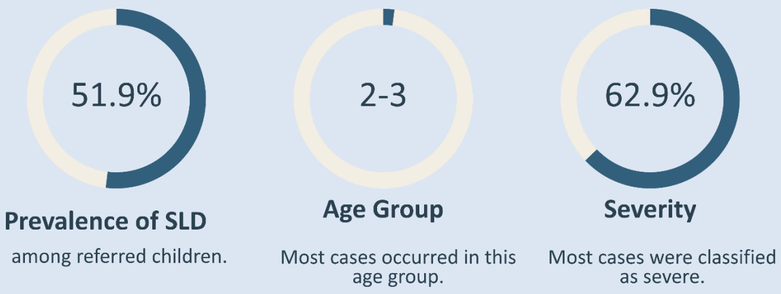
METHODOLOGY

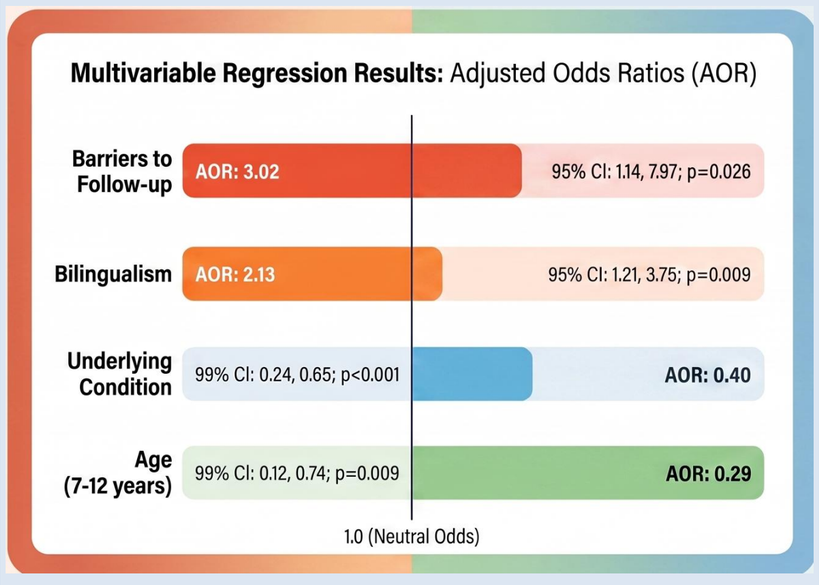
A cross-sectional study using multisource secondary clinical data from tertiary hospital with simple random sampling of 320 eligible children aged 1–12 years.

RESULTS

Summary of Sociodemographic Characteristics of SLD







- Risk Factors: Bilingualism/multilingualism and parental barriers to follow-up care were significantly associated with higher odds of SLD
- Protective Factors: Older age (7-12 years) and having an already diagnosed underlying medical condition were associated with lower odds of SLD.

ABSTRACT: Speech and language delay (SLD) is a critical public health concern that threatens long-term human capital and social equity. This study investigates the significant gap in localized clinical evidence regarding the socio-structural determinants and protective factors of SLD in diverse, multilingual settings. Utilizing a cross-sectional methodology, the research analysed multisource secondary data from 320 paediatric clinical records at a major Malaysian referral centre. Data collected included sociodemographic characteristics, language exposure, medical history, and healthcare-related barriers. Results indicate a high clinical prevalence of SLD at 51.9%, significantly exceeding national estimates. Multilingual backgrounds (AOR=2.13) and parental barriers to follow-up care (AOR=3.02) were associated with significantly higher odds of SLD. Conversely, older age and the presence of an underlying diagnosed condition were identified as significant protective factors. These findings imply that securing human capital requires an equitable approach to healthcare through culturally sensitive screening and the removal of logistical barriers. Aligning with sustainable development goals, this study advocates for integrated public health strategies to ensure inclusive developmental outcomes for all children.

Key words:
Language Development Disorders, Health Services Accessibility, Health Equity, Bilingualism, Social Determinants of Health, Early Intervention

DISCUSSION

51.9%
Clinical Prevalence Observed
It significantly exceeds national estimates, indicating a substantial need for development support in clinical settings

2.1x
Multilingual Children
Standard screening tools may not accurately reflect the acquisition patterns of bilingual/multilingual development.

Logistical Barriers Triple the Risk
Parents facing accessibility hurdles (transport, time)- experience higher odds of delayed intervention outcomes.

Early Years Are Highest Risk
Older children show protective trends, confirming that age 1-6 is the most critical window for delay.

Earlier Monitoring Enables Protection
Underlying medical diagnoses often show better progress due to earlier, protective developmental monitoring.

CONCLUSIONS

- Securing future human capital requires equitable, culturally responsive developmental services
- Sustained investments must focus on eliminating logistical healthcare barriers, strengthening early screening & integrating child development support within health & education systems to promote positive outcomes

ACKNOWLEDGMENTS

Approved by the REC, UiTM, and the MREC, Ministry of Health Malaysia. We acknowledge the NMRR Committee, Director General of Health Malaysia, CRC, and the ENT Department of Hospital Melaka for data access facilitation

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