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Retrospective investigation of infant growth and feeding records as a basis for monitoring and surveillance at a local community level

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Growth monitoring is an important component of infant, child and adolescent health surveillance at state, national and global levels. Infant Growth Monitoring (IGM) serves a number of functions at a community or population level, including identify factors or determinants associated with abnormal infant growth, identification of infant growth trends and intervention needs, and evaluation of community level interventions relating to infant nutrition and health. IGM systems require three phases to be effective as a health information and promotion system. These include measurement and recording, analysis and reporting. This study aimed to analyse information collected and recorded in Community Child Health Service infant health records from the Gold Coast Health Service District, in order to progress the development of a District level infant growth monitoring system. Infant records were systematically sampled based on proportional selection of charts from alphabetic clusters of files by surname (strata), to ensure equal probability of chart selection. Retrospective analysis of 1053 infant records over the 2001-2005 period inclusive, was conducted to assess the prevalence of abnormal infant growth (under and over weight/length) and explore the relationship between abnormal growth and a range of infant health and maternal socio-demographic variables. The socio-demographic attributes of the sample population were not significantly different from that expected of the local population sample frame, indicating low risk of sampling bias. The results of this analysis indicate breastfeeding duration rates and associated determinants similar to other sub-national population studies and the prevalence of at-risk growth trajectories in less than 5%.

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