Childhood Obesity in rural Queensland: how big is the problem?

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Background:
Rates of obesity in Australian pre-schoolers are among the highest in the world\textsuperscript{1} and may be increasing.\textsuperscript{1,2,3} Most agree that prevalence is higher in rural than metropolitan areas, however there has been little work examining rurality and childhood obesity specifically.\textsuperscript{1,4,5,6,7} Additionally, there is an inverse relationship between socioeconomic status (SES) and the prevalence of childhood obesity\textsuperscript{1,2,3,4,6,8,9,10} and SES may be lower in rural areas.\textsuperscript{1,4}

Multidisciplinary teams led by a general practitioner (GP) have been suggested as an effective management strategy for childhood obesity,\textsuperscript{11,12,13} however the uptake by Australian GPs of this strategy has not been reported.

Aims:
- To estimate the prevalence of childhood obesity in the Darling Downs, QLD
- To compare and contrast the management styles of rural and regional GPs

Method:
GP clinics in the Darling Downs region of Queensland were invited to participate. Anthropometric data collected from children seen at participating clinics for the Four-year-old Healthy Kids Check in the 12 months to 30\textsuperscript{th} June 2014 will be analysed. The prevalence of overweight and obesity will be estimated, and findings grouped into rural and regional settings for comparison.

GPs will be interviewed. Management styles, including barriers and enablers to the use of multidisciplinary teams, will be thematically analysed, comparing responses between GPs from rural and regional clinics. Community profiles of the postcode of participating clinics will be examined to comment on the region’s demographics, socioeconomic status and health service provision.

Results
Data collection is underway.

Prevalence
Data collection is currently underway. To date, four regional and four rural practices have consented to participate. Preliminary results from one rural and one regional clinic are shown graphically.
Interviews
To date, ten GPs have consented to interview, and two interviews have been conducted. Following the interviews, a thematic analysis of the transcripts will be undertaken. Results pending.

Discussion
As predicted, obesity appears more prevalent in rural than regional areas; however sample sizes were small, limiting generalizability.
Note the apparent discrepancy in the estimated prevalence of childhood obesity at age four years between the two criteria used. There was a marked difference in the cut-off points for overweight and obesity between the criteria for this age-group. Whilst the inherent flaws in using the BMI percentile criteria are known, the potential inaccuracy of the IOTF criteria for determining childhood obesity at the time of the adiposity rebound has not been previously described, and is an important finding for future research.

Of clinical and social concern is the high rate of childhood obesity, particularly in the rural population, at an age when children should be most lean. Further studies with larger populations are needed to fully explore this concerning trend.

Take Home Messages:
This Study Will:
- Report the estimated prevalence of obese pre-schoolers presenting for the Four-year-old Healthy Kids Check in the Darling Downs, QLD
- Compare and contrast management styles between rural and regional GPs
- Comment on the utilisation of multidisciplinary teams by GPs for managing childhood obesity

References


