Experience of Comprehensive Child Development Service (CCDS) in Princess Margaret Hospital - Children of teenage mothers in HK are not as high risk as we thought

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Introduction
According to overseas studies, children of teenage mothers are more likely to have accident or head injury, and more likely to attend A&E department or admitted to hospital due to accidents. We also expected that children are more likely to be abused/neglected by teenage mothers. Therefore, infants of teenage mothers are one of the high-risk-groups targeted by CCDS. PMH CCDS for teenage pregnancy started since 2006.

Objectives
To evaluate if CCDS can: (1) reduce AED attendance or hospitalization of these children; (2) reduce the risk of head injury or child abuse in these children; which reflect improvement in child health and also reduce preventable hospitalization.

Methodology
We retrieve all teenage mothers (<17 yrs old at date-of-delivery) cases from CDARS. Adult control group were mothers older than 18yrs. Health information of the children was retrieved from CMS. We compare the health and healthcare facilities usage of 3 groups of children: (1) Pre-CCDS (born in 2003-05), (2) CCDS (born in 2010-14), (3) Control (children of mother>18yrs)(born in 2014).

Result
Of the 133 children in the final cohort, 41, 46 & 46 were in the Pre-CCDS-group, CCDS-group and control-group respectively. There was no case of child abuse by mother in all groups. Of all attendance to AED: 32.4% (24/74), 40.5% (30/74) & 27.0% (20/74) were from Pre-CCDS-group, CCDS-group and control-group respectively. Of all episodes of hospitalizations: 26.8% (19/71), 35.2% (25/71) & 38.0% (27/71) were from Pre-CCDS-group, CCDS-group and control-group respectively. Concerning incidences of head injury: 33.3% (6/18), 50.0% (9/18) & 16.7% (3/18) were from
Pre-CCDS-group, CCDS-group and control-group respectively. All incidences of head injury were mild with no complication. There was no significant difference between 3 groups in terms of: AED attendance, hospitalization episodes and incidence of head injury. Conclusions: Children of teenage mothers in HK did not have higher risk of child abuse or severe head injury even before the start of CCDS. The incidences of AED attendance and hospitalization were similar between children of teenage and adult mothers. These results implied that teenage mothers in HK have satisfactory childcare and parenting support from their own families and social services. The result is useful for future remodeling of service for CCDS.