Early life factors associated with childhood trajectories of violence among the Birth to Twenty-Plus Cohort in Soweto South Africa (doi:10.1101/2023.10.27.23297689)

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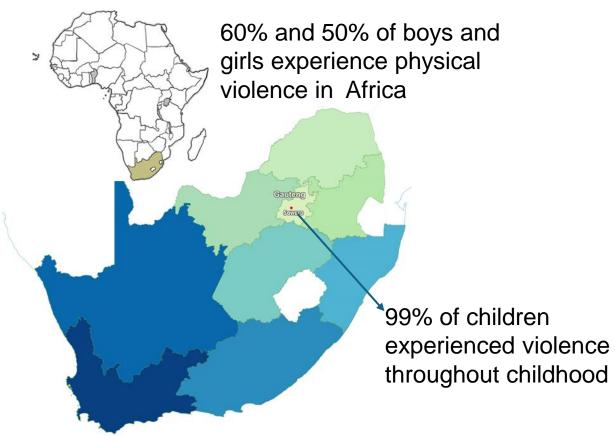






Introduction

Globally, greater than 50% of children experience violence each year.



- Majority of violence studies are based on cross-sectional or retrospective recall of violence experiences
- Limited studies in Africa assess longitudinal patterns of violence

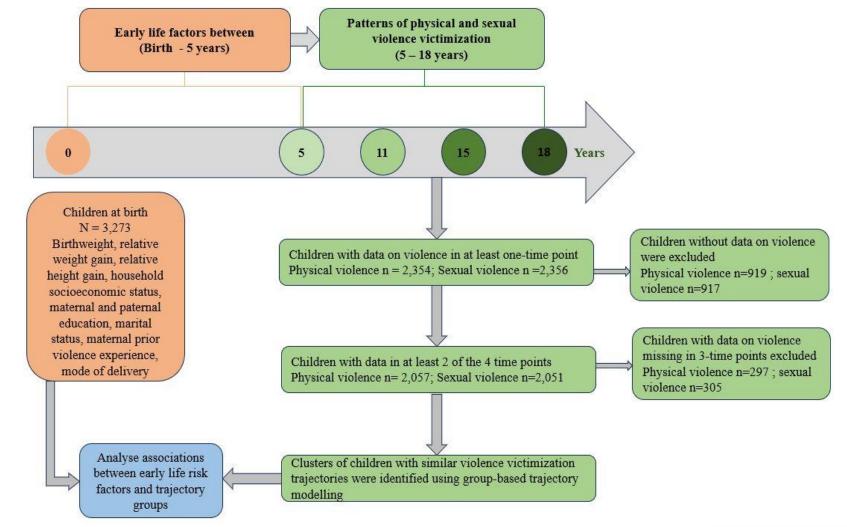
AIM

To generate physical and sexual violence victimization trajectories across childhood and evaluate early life factors predicting these violence trajectories in the study setting.

20% and > 30% of children 15-17 years experienced sexual and physical violence in South Africa



Methodology



Study setting: Soweto, Johannesburg, South Africa



Results: Characteristics of the study sample

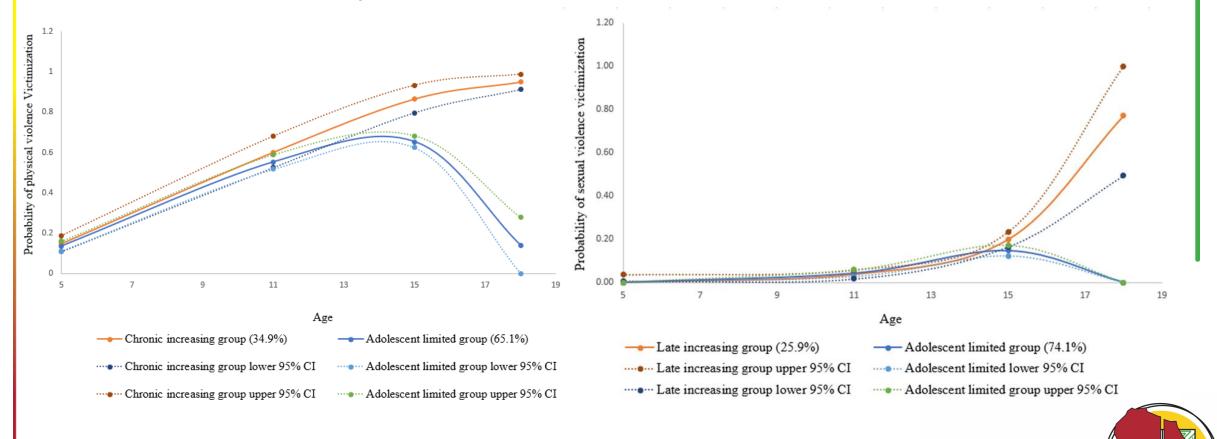
	Physical violence (%)	Sexual violence (%)		Physical violence (%)	Sexual violence (%)
Ν	2057	2051	Family level factors		
Violence trajectories Adolescent limited Chronic/ late increasing	65.1 34.9	74.1 25.9	Socioeconomic status Low Middle	65.0 20.9	64.8 21.0
Individual level factors			High Maternal education	14.1	14.2
Gender Female	52.5	52.4	Primary and below High school	12.3 79.1	12.4 79.1
Birth weight			Post school training	8.6	8.6
Low	11.3	11.2	Paternal education		
Child growth (mean, sd) Relative height gain	-0.04 (0.98)	-0.04 (0.98)	Primary and below High school Post school training	8.3 72.9 18.8	8.3 73.0 18.7
(0-2 years) Relative height gain (2-5 years)	0.00 (1.0)	0.00 (1.0)	Household crowding Yes No	41.8 58.2	42.0 58.0

Results

Physical violence victimization trajectories

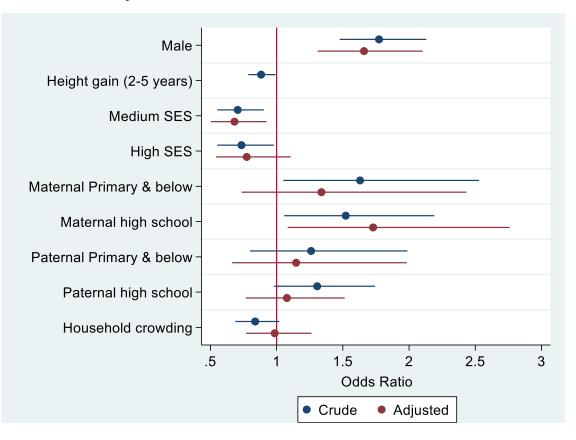
Sexual violence victimization trajectories

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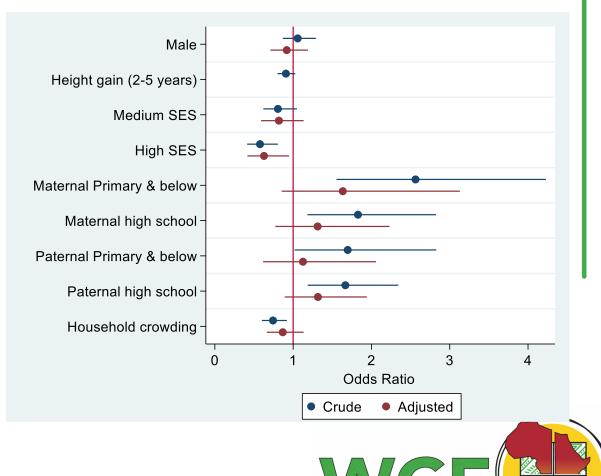


Results: Early life factors associated with violence trajectories

Physical Violence Victimization



Sexual Violence Victimization



Discussion

- Approximately a third and a quarter of children exhibited persistently increasing physical and sexual violence patterns throughout childhood, respectively.
- Individual (sex) and family level (Household SES and maternal education) factors predicted physical violence victimization trajectories.
- Poor linear growth in early childhood associated with delayed cognitive development, poor educational outcomes and rapid weight gain, all risk factors for physical violence victimization
- Vulnerability to late increasing sexual violence victimization patterns were limited to family level factors only (Household SES).



Conclusions and recommendations

- Children within the same environment can follow different patterns of violence victimization during childhood
- Both individual and family level early life factors contribute to increasing violence victimization patterns
- The results support existing research on the importance of quality nutritional support during the first 1000 days of a child's life, to prevent stunting.
- Need for early and integrated interventions targeting poverty alleviation, parenting and nutritional support.



Strengths	Limitations	
The longitudinal nature of data collection allows the characterization of violence patterns	Presence of large gaps between data collection points affected ability to discern more heterogeneous patterns	
Prospective study design minimizing the magnitude of recall bias	High proportion of missing data limited inclusion of child growth variables in the multivariable model	
Use of early risk factors at birth allows for temporal associations to be assessed	Use of parent or self reporting on sensitive issues may be subject to under- reporting or introduce social desirability bias	
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Individual and Society



