British Association of Child and Adolescent Public Health

1318

STARTING FROM SCRATCH...RESULTS FROM DEVELOPING A NOVEL PUBLIC HEALTH YOUTH VIOLENCE PREVENTION PROGRAMME IN NORTHERN IRELAND

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Background It is well recognised that paramilitary activity and sectarian violence were prevalent in Northern Ireland (NI) during 'The Troubles'. However, within NI, youth violence including penetrating knife trauma, is not well publicised, in contrast to the Republic of Ireland and elsewhere in the United Kingdom. Shockingly, the NI 2020 State of Child Health report stated that the incidence of injury by sharp object to young people (aged 15–19 years) was 38.2 per 100,000, which is on par with Scotland and England. We set up a medical working group, and aimed to scope out the feasibility of implementing a public health youth violence and knife crime prevention programme in NI.

Objectives Our objectives were to assess opinions on youth violence, review current interventions and investigate how to create an appropriate youth violence prevention intervention, for the right population.

Methods The medical working group consisted of paediatric physicians with an interest and experience in adolescent trauma and youth violence. We contacted and surveyed relevant professionals in NI, to have representation from Education, Youth Work, Mental Health, Social Care and Youth Justice System (YJS).

Results Findings of the scoping exercise included:

- Youth violence has not been the focus of strategy to date. A youth violence and psychological trauma network has been established. This is a collaboration of multiple professionals with an interest in youth violence, including, youth justice social workers, civil servants and education representatives.
- An adult focused violence prevention intervention model will be piloted in a district general hospital emergency department, utilising emergency department based social workers to educate violence victims during the 'teachable moment' and reduce further involvement.
- There are 977 10–19 year olds in the YJS, predominantly males and living in Belfast but limited meaningful healthcare data exists to find out the true scale of the problem. A checklist is currently being developed to improve data collection including screening for violence when a young person or adult attends the Emergency Department with an injury and screening for Adverse Childhood Experiences which are known risk factors for youth violence involvement.
- Plans are evolving to improve engagement with young people about perceptions and needs relating to youth violence and to set up targeted education-based interventions to break the cycle in those particularly vulnerable to youth violence recidivism.

Conclusions In conclusion, despite the concerning statistics about youth violence in NI, there are no current specific

strategies, policies or interventions to reduce youth violence. There is a large population of centrally located vulnerable at risk young people, within the YJS. As a result of our scoping, there is a growing interest among multidisciplinary professionals as to how best to tackle youth violence in NI and they are supportive of the proposed engagement strategy and medical education-based prevention programme to reduce youth violence.

International Child Health Group

1319

SON-PREFERENCE AND CHILD GROWTH AND DEVELOPMENT

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Background The period through pregnancy and the early years is crucial for optimising child growth, development and lifelong well-being. Son-preference (family desire for male over female children) disadvantages girls through mechanisms including unequal distribution of resources (e.g. food or medicine) and parental-time, abuse, short birth intervals, sex-selective abortion and infanticide. In India, Child Sex Ratios are among the worst in the world and evidence suggests son-preference is associated with considerable disadvantage, however, the impact on early years development is not well-described.

Objectives We aimed to 1) describe the prevalence of reported son-preference in Haryana, India and 2) investigate effects of this on girls' early childhood growth and development.

Methods We used data from the Early Life Stress sub-study of the SPRING cluster randomised controlled trial. 693 mothers were interviewed around children's 1st birthday. Mothers reported whether they or other family members expressed son-preference when the child was born and at that time. Child height-for-age, weight-for-age and the Bayley Scales of Infant Development III (BSID-III) were measured at 18 months. Associations were assessed by mixed-effects linear regression.

Results 32.5% of families expressed son-preference at birth; 16.4% did so at 12 months of age. Growth and development outcomes were consistently poorer in girls whose families expressed son-preference - at 12-months changes were: -0.41 SD ([-0.64,-0.19], $p<0.001$) in height-for-age z-scores, -0.25 SD ([-0.48,-0.03], $p=0.025$) in weight-for-age z-scores, -3.9 points ([-6.01,-1.77], $p<0.001$) in motor scores, -4.37 ([-6.70,-2.04], $p<0.001$) in cognitive scores and -8.60 ([-11.68,-5.52], $p<0.001$) in language scores (table 1).

Conclusions Our results show strong, consistent associations between familial son-preference and impaired child growth and development. We find son-preference is detrimental to girls even as young as 18 months of age, a critical period in early childhood.

Abstract 1319 Table 1 Association between son-preference and girls' height-for-age z-scores (HAZ), weight-for-age z-scores (WAZ) and Bayley Scales (BSID-III) scores at 18 months, assessed by mixed-effects linear regression. Change in Estimates (CIE) are shown for the predicted mean of each son-preference group versus the no son-preference ('none') group

Adjusted for cluster and trial arm																	
Predicted anthropometrics								Predicted BSID-III scores									
Son- preference	n (%)	HAZ			WAZ			Motor			Cognitive			Language			
		Mean	CIE (95% CI)	p	Mean	CIE (95% CI)	p	Mean	CIE (95% CI)	p	Mean	CIE (95% CI)	p	Mean	CIE (95% CI)	p	
None	391 (66.4)	-1.61	constant			-1.27	constant			95.4	constant			93.3	constant		
Any	198 (33.6)	-1.87	-0.26 (-0.44, -0.08)	0.004*	-1.41	-0.14 (-0.31, 0.03)	0.104	93.1	-2.32 (-3.95, -0.68)	0.006*	91.7	-1.63 (-3.43, 0.17)	0.076	89.3	-3.75 (-6.15, -1.35)	0.002*	
Birth-only	101 (17.2)	-1.72	-0.11 (-0.33, 0.11)	0.337	-1.31	-0.03 (-0.25, 0.18)	0.758	94.6	-0.80 (-2.89, 1.28)	0.450	94.3	+1.00 (-1.29, 3.29)	0.393	94.0	+0.89 (-2.13, 3.92)	0.562	
12-months	97 (16.5)	-2.03	-0.41 (-0.64, -0.19)	<0.001*	-1.52	-0.25 (-0.48, -0.03)	0.025*	91.5	-3.89 (-6.01, -1.77)	<0.001*	89.0	-4.37 (-6.70, -2.04)	<0.001*	84.5	-8.60 (-11.68, -5.52)	<0.001*	

Quality Improvement and Patient Safety

1320

IMPACT OF IMPLEMENTING THE PHYSICIAN ASSOCIATE ROLE IN PAEDIATRIC SURGERY IN A UK CENTRE

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Background Physician Associate's (PA) are professionals that are trained to the medical model and work alongside a consultant supervisor. The medical workforce within the NHS is evolving constantly and junior doctors are ever changing members of the clinical team and are increasingly being diverted away from service provision. Great Ormond Street Hospital has responded to this change by recruiting PA's to support provision of care.

Objectives Our aim was to review early implementation and the impact on clinical practice in our unit.

Methods The surgical department initially recruited 5 PA's. At the time of employment all had passed the National Exam and were on the National Register (MVR). Three of the five posts were funded through charitable funds and were recruited directly from the PA Master's course at St. George's University, London.

For other two posts the application process was open to candidates nationally, internationally and on the MVR.

All PA's underwent a prolonged period of induction and orientation within the respective clinical teams.

Results During induction PA's were supernumerary to the junior doctor body. Following this they were integrated into respective teams and performed ward based duties. Now PA's are fully part of the SHO day time rota which increased the exposure for Core Surgical Trainees to further attend theatre sessions and other relevant training activities.

There has been a subsequent reduction in the need to recruit locum doctors along with improvement in continuity of care and audit of clinical practice. Due to current licensing

Abstract 1320 Table 1

	PA	Doctors	Significance
Median age at biopsy (days, range)	30 (2–306)	31.5 (1–393)	NS
Mean number of specimens	2.73	2.65	NS
Non- Diagnostic procedures	1 (2%)	9 (18%)	0.0155 (p<0.05)
Complication rate	1 (2%)	2 (4%)	NS

restrictions PA's are unable to prescribe or authorise ionising radiation investigations but can be trained in procedural care. One such procedure is rectal suction biopsy which has been audited within the department showing the PA performance is on par with medical peers (table 1).

The level of responsibility expands with the length of time a PA works within a department. They are involved in designing protocols and care pathways to maintain the highest level of care.

With the recent pandemic PA's became part of the COVID Acute Surgical Rota ensuring continuity of care was maintained along with working with a wider range of complex surgical patients. Giving PA's the opportunity to expand their clinical skill set and maintain the highest level of patient care.

To maintain a high level of professional development one PA is working closely with the post graduate medical team to develop an educational framework for all PA's across the entire Trust.

Conclusions PA's have the necessary skills to perform to a high standard even in areas of complex clinical care.

They work within the healthcare team and are trained to assess, examine and management care alongside doctors. They are a vital link to all other healthcare personnel and provide continuity in an environment where junior doctors change frequently and are increasingly difficult to recruit.