

## Public Health

Chair: D Eldemire-Shearer and H Scarlett

## (O – 20)

**Knowledge, attitudes and practices of healthcare workers in the provision of contraceptives to adolescents***S Mair, H Trotman, A Harrison*

**Background:** Jamaican adolescents initiate sexual activity at an early age and the adolescent fertility rate in Jamaica is the fourth highest in the Caribbean. This study explored the knowledge, attitudes and practices of Jamaican healthcare workers (HCWs) in the provision of contraceptive services to Jamaican adolescents.

**Materials:** A cross-sectional study was conducted in health centres in Jamaica among HCWs engaged in contraceptive counselling and provision. A self-administered questionnaire explored HCWs' knowledge of, attitudes to and practices in contraceptive provision to adolescents. Descriptive analyses were performed, statistical significance was taken at the  $p < 0.05$  level.

**Results:** One hundred and forty-four HCWs participated with a mean age of  $38.5 \pm 11.9$  years. The majority of participants were females ( $n = 127$ , 88.8%). Healthcare workers mean knowledge score on adolescent sexual and reproductive health (SRH) issues was 1.95 (maximum possible score was five). The majority of HCWs ( $n = 140$ , 99.3%) approved of family planning and reported a positive attitude towards provision of SRH services to adolescents but significantly less actually provided these services.

Identified barriers to administering contraceptive services to adolescents included legal obstacles, limited resources and intrinsic adolescent factors. Revision of the relevant laws, education of adolescents and healthcare workers were suggested as methods that could improve SRH services to adolescents.

**Conclusion:** Healthcare workers report a positive attitude towards the provision of contraceptives to adolescents but report low frequency of actual administration or prescription of contraceptives to adolescents. Identified barriers to optimal SRH service provision to adolescents are amenable to change through educational and other training interventions.

## (O – 21)

**Knowledge and attitudes of a cohort of male university students in Jamaica regarding human papilloma virus (HPV) and the HPV vaccine***S Parkinson, I Bambury, C Rattray**Department of Obstetrics and Gynaecology, The University of the West Indies, Jamaica*

**Background:** Cervical cancer is the second most common cancer in Jamaica with an incidence of 17.4/100 000. The human papilloma virus (HPV) is the most important causative agent. Human papilloma virus infection is associated with the development of other anogenital cancers in women and men. Two vaccines were approved for the prevention of cervical cancer by the Food and Drug Administration (FDA) and are available in Jamaica (4, 5). This study assessed the knowledge and attitudes in a male cohort towards HPV and HPV vaccine.

**Methods:** This was a cross-sectional study in which two hundred male students were recruited. Information for this study was gathered from responses given in a self-administered questionnaire. Data was analysed using the statistical package for social sciences (SPSS) version 20.

**Results:** The mean age of the respondents was 22.6 years. 50.5% had heard of HPV. Of those who knew, only 37.6% vs 39.6% of respondents reported that sexual intercourse was a requirement for transmission, while 22.8% did not know. Forty-three per cent knew that HPV causes genital warts and 42% knew of an association with cervical cancer, 16.5% of the respondents knew of the HPV vaccine. Only 21.2% knew that the HPV vaccine protects against cervical cancer while the remaining 78.8% either said that it did not provide protection or did not know, 15.3% knew that the vaccine is approved for both males and females while 84.7% did not know.

**Conclusion:** There was significant knowledge deficit in the awareness of HPV and the HPV vaccine in male university students.

### (O – 22)

#### **Prevalence of low vision and blindness in Jamaican children**

*S Amarakoon, L Mowatt*

**Background:** It is a joint collaborative goal of the World Health Organization (WHO) and International Agency for the Prevention of Blindness (IAPB) to intensify and accelerate prevention of blindness activities worldwide so as to achieve elimination of avoidable blindness by the year 2020. There has not been any current research over the past 20 years in Jamaica regarding the main causes of childhood blindness and visual impairment within the local population.

**Materials:** Fifty children, aged four to 19 years, attending the Salvation Army School for the Blind were screened, using a modified version of the WHO Prevention of Blindness Eye Examination Record for Children with Blindness and Low Vision over a one-year period.

**Results:** Thirty-seven patients were blind, three had visual impairment, eight had severe visual impairment, one did not fall into the category of blind or visually impaired and one child could not be tested. The main causes of low vision and blindness were uncorrected refractive errors and retinal dystrophies. In the male cohort, the main causes were myopia (8%), retinal dystrophy (8%) and optic atrophy (8%). In the female cohort, the most common causes were myopia (8%), retinal dystrophy (8%) and refractive amblyopia (8%).

**Conclusion:** In 1988, Rubella infection was the most common reason for childhood visual impairment and blindness. With the inception of immunization and improved methods for screening, the current prevalent reasons for blindness are mainly due to retinal disorders and uncorrected refractive errors.

### (O – 23)

#### **Jamaican adolescents attitude towards healthcare services**

*C Tyrill, H Trotman, A Harrison*

**Background:** The causes of adolescent morbidity and mortality are often due to modifiable risk factors. This study sought to describe Jamaican adolescents' health-seeking behaviour, to determine whether healthcare services are meeting adolescents' expectations and whether there is rural/urban variation.

**Materials:** A cross-sectional survey was conducted among in-school adolescents. A self-administered questionnaire collected demographic details, information on adolescent's perceived health status and the quality of healthcare services received. Descriptive analyses were performed, statistical significance was taken at the  $p < 0.05$  level.

**Results:** The sample consisted of 480 adolescents (237; 49.4%) attending rural and (242; 50.4%) urban schools, with a M:F ratio of 0.6:1 and a mean  $\pm$  SD age of  $15.5 \pm 1.8$  years. Urban adolescents were more likely to access care privately than rural adolescents ( $p = 0.007$ ). Urban and rural adolescents rated their health services similarly, with most reporting services as good or excellent. Younger adolescents (11–14 years) and those receiving care privately gave higher ratings for health services ( $p < 0.001$ ). Females ( $p = 0.03$ ), older adolescents ( $p = 0.002$ ) and adolescents being seen privately ( $p = 0.02$ ) were more likely to have had the healthcare provider (HCP) discuss confidentiality with them, however, approximately half of the adolescents had not gotten to speak privately with their HCP. The health topics discussed by HCPs were congruent with the needs of the adolescents but this anticipatory guidance did not occur as often as it should. Parental refusal to take the adolescent to the doctor, use of home remedies and financial constraints were the major factors limiting adolescents' access to health services.

**Conclusions:** Adolescents have a fairly good perception of healthcare services, however, not all adolescents have the opportunity to discuss confidential issues with healthcare providers and anticipatory guidance is not given to adolescents as frequently as it should. These findings have potential negative implications for decreasing adolescent morbidity and mortality which can be significantly reduced by timely screening and appropriate anticipatory guidance.

### (O – 24)

#### **Quality of asthma management in children attending health centres in Kingston and St Andrew, Jamaica: how do we compare to international clinical practice guidelines?**

*TF Ricketts-Roomes, N Waldron, K James*

**Background:** Asthma is a global health problem whose prevalence has increased in all countries worldwide, especially in children. Studies in other countries found non-adherence to clinical practice guidelines for asthma despite their availability, however, there is a paucity of these data in our local setting, hence our research.

**Materials:** Data were collected from docketts of children with asthma aged 2–17 years old attending selected health centres in Kingston and St Andrew using data abstraction forms which assessed structure, process and outcome of care. Statistical analyses were done using Statistical Package for Social Sciences version 17.0. Practice guidelines formulated by Global Initiative for Asthma were used for comparison.

**Results:** The highest proportion of children (36.6%) were six to 10 years old and males accounted for the majority. The median number of visits for asthma across the health centres ranged between one and two. Almost one in five

children with asthma had no visits for asthma for the period of review. Across all health centres, the majority of visits were for acute asthma exacerbations. There was generally poor documentation of performance indicators for asthma care.

**Conclusion:** The findings of the study indicate that management of asthma in health centres in Kingston and St Andrew, Jamaica, is not in line with international clinical practice guidelines and a paradigm shift in management is required.

(O – 25)

**Uptake and barriers to completion of the human papilloma virus (HPV) vaccine in a cohort of Jamaican women and men**

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**Background:** Human papilloma virus (HPV) is a sexually transmitted pathogen which causes ano-genital disease in both men and women. Primary prevention involves vaccination, two of which are readily available in Jamaica.

Gardasil® is a quadrivalent vaccine which protects against HPV Types, 6, 11, 16 and 18 and Cervarix® is a bivalent vaccine with coverage against HPV Types 6 and 11. These are given in three doses, 0, 1–2 and 6 months. However, there may be barriers to uptake and completion of the vaccines. The aim of this study was therefore to ascertain these barriers and reasons for incomplete vaccination.

**Materials:** All persons who received the HPV vaccine since the implementation of the database in December 2010 at the Colposcopy unit at the University hospital were invited to participate in the study. A telephone survey was conducted and the information gathered was analysed using SPSS version 20. Chi-squared tests and Fisher's exact tests were used to assess associations.

**Results:** One hundred and eight-five persons received the HPV vaccine between December 2010 and December 2015. Of these only 55 persons were successfully contacted and agreed to participate. Of these 51 were women and four were men. Eighteen per cent of the study population received two or less doses of the vaccine and the cost of the vaccine was the barrier to completion in 100% of these patients.

**Conclusion:** Cost was the main barrier to uptake and completion of the HPV vaccination in this study population. This has implications for policy-makers as cervical cancer is preventable.