Competition for Adolescents’ Sexual and Reproductive Health Values
Is the Media Winning?
D Holder-Nevins, D Eldemire-Shearer, A McCaw-Binns

ABSTRACT

Objective: This study aimed to understand the sources and content of sexual and reproductive health (SRH) information among Jamaican adolescents.

Subjects and methods: A national survey of adolescents 9–18 years old attending public schools in Jamaica was done using multi-stage stratified cluster sampling techniques. Questions included in a 57-item questionnaire assessed adolescents’ awareness of SRH messages promoted by the Ministry of Health (SSRHM) and through Dancehall, (DSRHM). The data were analysed using the Statistical Package for the Social Sciences (SPSS) Version 12.0. Descriptive statistics were used to summarize the data and relationships between variables tested using bivariate analysis, with a ‘p’ value of 0.05 accepted as significant.

Results: The mean age of respondents was 12.8 (± 2.06) years for boys and 12.8 years (± 2.23) for girls. Television (76.9%), radio (55.4%) and guidance counsellors (55.2%) were the most common sources of SSRHM with no statistically significant demographic differences. Condom use was the only SSRHM, among the seven assessed, that was reported by more than half of the respondents (85.4% boys and 80.3% girls, p = 0.025).

Half the number of the male specific DSRHM assessed was reported by more than 50% of boys. Hurting men who have sex with men, and having many girlfriends were the leading messages reported (69.8% & 65.3%). Among girls, five of nine female-related DSRHM were reported by most girls. Having relationships with males who have material resources (66.8%) and being independent (64%) were the leading messages reported.

Conclusions: The electronic media was the leading source of SSRH messages and condom use was the only SSRHM that outstripped the variety of gender specific DSRHM messages, some of which contradict standard messages.

Competencia por los Valores Sexuales y Reproductivos de la Salud y los Adolescentes: ¿Ganan los Medios de Radiodifusión?
D Holder-Nevins, D Eldemire-Shearer, A McCaw-Binns

RESUMEN

Objetivo: Este estudio tuvo por objeto entender las fuentes y el contenido de la información sobre la salud sexual y reproductiva (SSR) entre los adolescentes jamaicanos.

Sujetos y Métodos: Se realizó una encuesta nacional entre adolescentes de 9–18 años de edad que asistían a escuelas públicas en Jamaica, para lo cual se usó una técnica de muestreo multifásico estratificado por conglomerados (cluster). Las preguntas incluidas en un cuestionario de 57 ítems evaluaban la concienci de los adolescentes acerca de los mensajes de SSR promovidos por el Ministerio de Salud (SSRMS) y por la llamada música dance hall (SSRMD). Los datos fueron analizados usando el Paquete Estadístico para las Ciencias Sociales (SPSS), versión 12.0. Se usaron estadísticas descriptivas para resumir los datos y las relaciones entre las variables sometidas a prueba usando un análisis bivariado, en el que el valor ‘p’ de 0.05 fue aceptado como significativo.

Resultados: La edad promedio de los encuestados fue 12.8 (± 2.06) años para los niños y 12.8 años (± 2.23) para las niñas. La televisión (76.9%), la radio (55.4%), y los consejeros a cargo de la orientación...
INTRODUCTION
Adolescents (aged 10–19 years) are estimated to constitute one-fifth of the world’s population. In the Caribbean, adolescents comprise 25% of the population while in Jamaica they accounted for 20% of the national figures in 2005 (1–2).

It is believed that as they grow and become sexually active, adolescents face serious health risks. They often engage in aberrant behaviours some of which have significant potential for adverse medical and social outcomes (3). Much unhealthy behaviour adopted during adolescence persists into adult life contributing to adult morbidity and mortality. According to WHO, adolescents face many challenges in their formative years and their health, more than in other groups, is shaped by an interplay of physical, psychological, social and environmental factors. Some of the challenges they face include poverty, early sexual debut which contribute to teen parenting and sexually transmitted infections including HIV, substance use and abuse and injuries resulting from accidents and violence (4).

As part of the strategies to achieve the millennium development goal of halting and reducing the spread of HIV and other communicable diseases, control measures targeting adolescents are mandatory. Understanding adolescents, their language, culture and interests, is a starting point in helping them to understand some of the risks they face and the options available to them to preserve their sexual health and well-being.

Adolescents require a supportive environment to enable them to make healthy choices. The socio-cultural environment will vary from one society to another and some issues may converge in one community over others. With respect to the sexual and reproductive health (SRH) of adolescents, it is important for countries to understand what issues prevail and how to enhance social support thereby reducing sexual health risks in this target group. The media, levels of parental support and guidance and the availability or absence of life skills education to balance environmental challenges are a few key areas of focus.

The use of different media, including the internet, music and television, has raised many concerns about adolescents’ premature exposure to sexual information in a context that causes more harm than good. Kunkel posits that sexually responsible media include values about commitment in relationships, prevention of pregnancy and consideration of consequences of sexual behaviour. These values, he believes, are often missing from many media portrayals (5). Reports from North America show that interpretation of sexual health issues from the media vary according to gender and age. It is alleged that children are often protected by naivety when interpreting the real meaning of some sexual health messages and girls are more likely than boys to see media portrayals as real (6).

There is evidence that cultural and social factors, whether obvious or not, can influence reproductive health decisions (7). Therefore, it is important to create a balance in the quality of SRH education from formal and informal sources. As part of planning or evaluation of interventions to influence this balance, it is important to understand how adolescents perceive existing information available to them. This paper describes the demographic profile of Jamaican adolescents enrolled in public schools and their self-report of the sources from which they receive SRH information of different content. Standard SRH messages are compared with those in popular dancehall culture.

SUBJECTS AND METHOD
Ethical approval was received from the Ethics Committee of the Faculty of Medical Sciences/The University Hospital of the West Indies to conduct a national survey of adolescents 9–18 years of age attending public schools in Jamaica. A multi-stage stratified cluster sampling technique was used to recruit participants allowing for a 95% level of confidence or 5% margin of error and making allowances for the possibility of non-responses and enrolment versus attendance discrepancies.

Schools were stratified into three basic strata:

- Stratum 1: Grades 4–6 of all Primary Schools
- Stratum 2: Grades 7–9 of All-age, Primary/Junior High Schools

(55.2%) fueron las fuentes más comunes de la SSRMS, sin que se produjeran diferencias demográficas estadísticamente significativas. El uso del condón fue el único aspecto del SSRMS entre los siete evaluados, que fue reportado por más de la mitad de los encuestados (85.4% niños y 80.3% niñas, p = 0.025). La mitad de los elementos masculinos específicos del SSRMS evaluados, fue reportada por más del 50% de los varones. Hombres abusivos que tienen sexo con otros hombres y el tener muchas “amigas”, fueron los principales reportados (69.8% and 65.3%). Entre las jovencitas, cinco de cada nueve mensajes relacionados con las mujeres, fueron reportados por la mayor parte de ellas. Mantener relaciones con hombres que poseen recursos materiales (66.8%) y el ser independientes (64%) fueron los principales mensajes reportados.

**Conclusiones:** Los medios electrónicos fueron la fuente principal de los mensajes de la SSR y el uso del condón fue el único de la SSRMS que superó la variedad de mensajes específicos de género de la SSRMS, algunos de los cuales contradicen los mensajes standards.
Stratum 3: Grades 7–11 of Secondary High Schools (inclusive of Technical High Schools)

Using school enrolment as a measure of size, two schools in each stratum were selected using the standard probability proportional to size (PPS) methodology and where possible, at least one school in each stratum was drawn from a rural location. At the school level, grades were randomly selected to be sampled and the number of students interviewed was evenly drawn from the streams in that grade. At the class level, the attendance register was used as a sample frame to systematically select those to be interviewed.

A 57-item questionnaire was interviewer administered by adolescents trained for the purpose. The section of the questionnaire relevant to this paper contained items that sought to measure participants’ awareness about standard SRH messages (SSRHM) promoted by the Ministry of Health in Jamaica and the sources through which such messages were being received. The SSRHM were defined as promotional taglines that were the main messages in reproductive health educational campaigns by the Ministry of Health during the period 2000–2004. There were seven such taglines that conveyed messages of condom use, abstinence and delaying sexual involvement until there is positive self-awareness.

Another set of items was included to assess awareness of Dancehall sexual and reproductive health messages (DSRHM). These were items developed based on a qualitative review of Dancehall songs identified by adolescents as being a part of their listening menu. The SRH themes from these songs were defined as messages that idealize any sexual behaviours or gender roles that, if followed, can increase or decrease the chances for good SRH. Items that assessed demographic characteristics of participants were also included.

The data were analysed using the Statistical Package for the Social Sciences (SPSS) Version 12.0. Descriptive statistics were used to summarize the data and relationship between variables was tested using bivariate analysis methods. Significance was accepted at the 0.05 level for chi-square test and correlation coefficient.

RESULTS

Demographic characteristics of respondents

The Table details the demographic characteristics of respondents. The 1626 adolescents interviewed, accounted for a response rate of 97% of a projected 1680. The parishes of Clarendon and St Mary had the lowest response rates of 82% (98) and 73% (88) respectively.

Respondents ranged in age from 9–18 years, with a mean of 12.84 (± 2.06) years for boys and 12.80 years (±2.23) for girls, these being similar to the weighted mean age of 12.82 years based on school type. When respondents were grouped by three-year age intervals, those 12–14 years accounted for 49.1% of the sample while the age group 15–18 years had the lowest representation of 21.4%. While there were no significant gender differences by age and urban/rural setting, significantly fewer boys ($p = 0.001$) were located in high schools (28.8% vs 36.5 for girls), with boys more likely to be found in All Age and Junior High Schools (37.2% vs 28.7%).

One in five children was living with either or both parents. Equivalent numbers lived with either their mothers alone or both parents. While there was no significant overall difference between living arrangements and gender of the child, more boys (7.3%) than girls (5.6%) reported living with their fathers only.

Seventy-three per cent of respondents reported that religion was very important to them; 84% of whom said they attended church weekly. Even among children who rarely attended church, 63% also said religion was very important to them. Females (77.1%) were more likely than males (61.7%) to report going to church weekly or almost weekly and to perceive religion as very important (83% and 74.6%, $p < 0.01$).

Sources of standard SRH messages

Only 53.8% of respondents said they had discussed sexual matters with their parents and guardians in the past. Children aged 9–11 years (57%) were more likely than others to report not having such discussions in the last year ($p < 0.01$). Boys, however, (54.7%) were more likely than girls (38.5%) to report having never discussed sexual matters with parents/guardians ($p < 0.01$).

Table: Demographic profile of participants

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Males (n = 769)</th>
<th>Females (n = 857)</th>
<th>Total (n = 1626)</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geographic location</strong></td>
<td></td>
<td></td>
<td></td>
<td>0.36</td>
</tr>
<tr>
<td>Rural</td>
<td>295 (38.4%)</td>
<td>310 (36.2%)</td>
<td>605 (37.2%)</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>474 (61.6%)</td>
<td>547 (63.8%)</td>
<td>1021 (62.8%)</td>
<td></td>
</tr>
<tr>
<td><strong>Age groups (in years)</strong></td>
<td></td>
<td></td>
<td></td>
<td>0.05**</td>
</tr>
<tr>
<td>9–11</td>
<td>212 (27.5%)</td>
<td>263 (30.7%)</td>
<td>475 (29.2%)</td>
<td></td>
</tr>
<tr>
<td>12–14</td>
<td>402 (52.3%)</td>
<td>396 (46.2%)</td>
<td>798 (49.1%)</td>
<td></td>
</tr>
<tr>
<td>15–18</td>
<td>155 (20.2%)</td>
<td>198 (23.1%)</td>
<td>353 (21.7%)</td>
<td></td>
</tr>
<tr>
<td><strong>School type</strong></td>
<td></td>
<td></td>
<td></td>
<td>&lt; 0.01*</td>
</tr>
<tr>
<td>Primary</td>
<td>261 (33.9%)</td>
<td>298 (34.8%)</td>
<td>559 (34.4%)</td>
<td></td>
</tr>
<tr>
<td>All-age/jr high</td>
<td>286 (37.2%)</td>
<td>246 (28.7%)</td>
<td>532 (32.7%)</td>
<td></td>
</tr>
<tr>
<td>High (all types)</td>
<td>222 (28.9%)</td>
<td>313 (36.5%)</td>
<td>535 (32.9%)</td>
<td></td>
</tr>
<tr>
<td><strong>Living with whom</strong></td>
<td></td>
<td></td>
<td></td>
<td>0.52</td>
</tr>
<tr>
<td>Mother &amp; other rel.</td>
<td>281 (36.5%)</td>
<td>327 (38.2%)</td>
<td>608 (37.4%)</td>
<td></td>
</tr>
<tr>
<td>Father &amp; other rel.</td>
<td>56 (7.3%)</td>
<td>48 (5.6%)</td>
<td>104 (6.4%)</td>
<td></td>
</tr>
<tr>
<td>Both parents</td>
<td>271 (35.2%)</td>
<td>309 (36.1%)</td>
<td>580 (35.7%)</td>
<td></td>
</tr>
<tr>
<td>Other rel/non-rel.</td>
<td>161 (20.9%)</td>
<td>173 (20.2%)</td>
<td>334 (20.5%)</td>
<td></td>
</tr>
<tr>
<td><strong>Church attendance</strong></td>
<td></td>
<td></td>
<td></td>
<td>&lt; 0.01*</td>
</tr>
<tr>
<td>Weekly/almost weekly</td>
<td>474 (61.7%)</td>
<td>661 (77.1%)</td>
<td>1135 (68.9%)</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>99 (12.9%)</td>
<td>89 (10.4%)</td>
<td>188 (11.6%)</td>
<td></td>
</tr>
<tr>
<td>Rarely or not at all</td>
<td>195 (25.4%)</td>
<td>107 (12.5%)</td>
<td>302 (18.6%)</td>
<td></td>
</tr>
</tbody>
</table>

*Chi-squared test significant at the 0.01 level; ** Chi-squared test significant at 0.05 level.
With respect to standard SRH education themes, the message ‘use a condom’ was reported by most participants (85.4% boys and 80.3% girls) with males significantly more likely to make such report ($p = 0.025$). For all other standard messages, girls outstripped boys in reports of having heard them.

In general, more girls than boys reported getting SSRHM from all the different sources they were questioned about. Television (76.9%), radio (55.4%) and guidance counsellors (55.2%) were the most common sources of SSRHM. Significantly more males (74%) than females (61%) reported not receiving SSRHM from their mothers ($p < 0.01$), however no gender difference was reported regarding not getting these messages from their fathers (81.9% males, 81.0% females; $p = 0.625$). Getting information from youth clubs and friends were the least common sources of SSRHM (Fig 2).

**DISCUSSION**

These findings give an indication about sexual and reproductive health among adolescents enrolled in public schools in Jamaica. They, however, do not represent the entire adolescent population as those not enrolled in any school at the time of the survey were excluded.

The proportion of children in the 12–14-year age group was 18% above the national average for this age group reported by the Statistical Institute of Jamaica in 2005 (8). There was also a 6.2% difference between the national figures and the 15–18-year age group sampled. The mal-distribution by gender between different levels of the education system however, may be an indication of the system’s failure, especially to educate boys sufficiently to ensure that they progress towards higher educational opportunities.

It is internationally recognized that the education and health status of women have direct relationship to the health status of children. In this research, the proportion of respondents living with their mothers was higher than other types of living arrangements. The proportion reporting that they got SRH messages from mothers and those who discussed sexual matters with mothers do not suggest transfer of such information from this source. Fathers seem to be even worse in helping with the process. Since such parenting behaviours can be perpetuated when adolescents become parents, the need for parental empowerment exists to help diffuse SRH educational messages to their children. It is noteworthy however that girls more than boys, in this research, reported getting SRH information from mothers,

**Dancehall music as a source of SRH messages**

Among boys, messages about hurting men who have sex with men (MSM) and having many women were the male specific messages reported most (78.4% and 65.9% respectively). Girls reported female specific messages about having relationships with males who have material resources (67.8%) and making themselves independent (63.4%). Just less than half the number of girls and over 60% of boys got the condom use message from Dancehall while pregnancy prevention messages were reported by 42% of girls and 29% of boys.

![Fig. 1: Distribution of living arrangements.](image1)

![Fig. 2: Distribution of sources of standard SRH messages.](image2)

![Fig. 3: Gender comparison of SSRHM heard.](image3)
guidance counsellors and churches. Since these suggest female dominated sources of SRH education, it could be assumed that women are nurturing girls more than boys at these critical points of socialization and this may be another missed opportunity to educate boys sufficiently about sexual and reproductive health matters.

Two studies in Ethiopia and the Philippines have found parental influences as protective factors against risky sexual behaviours (9–10). In addition, one study done in Jamaica in 2005 found that having caring persons in the home was a protective factor against risk behaviours among school-based adolescents (11). It can be assumed based on the findings of this research that there are some gaps to be closed in protecting the SRH of Jamaican adolescents.

This study confirms earlier findings (12) on the importance of the electronic media in SRH education. For every standard SRH message, there are several competing discrepancies promoted through movies, commercials and music and this has implications for social learning among children who are at an impressionable stage of development. While it may be difficult to regulate the kinds of themes included in the content of different media portrayals, sustained efforts at empowering adolescents to be media literate and to clarify their own values about SRH may be more useful. This must be the combined effort of institutions like the family, schools and religious entities.

‘Risks’ according to Kirby (13) include factors that increase the chances of negative outcomes or discourage positive behaviours that can prevent them. Most of the Dancehall messages included in this research could be classified as promoting risks based on Kirby’s definition. The gender specific nature of these messages may be an explanation of why they are reported more than the generic standard messages. Indications are that standard SRH themes that promote abstinence are far less reported compared to Dancehall themes about sexual liberation. The values attached to the various behaviours would of course depend on where the strength of social influence on these matters lies and a subject for subsequent reports. Health promotion programme planners must consider making formal SRH themes more gender specific and appealing to adolescents in content and format of audiovisual delivery.

In conclusion, this study has confirmed that the electronic media constitute the major sources of SRH education among adolescents and that while condom use messages are being received from dancehall and standard message sources, messages that promote potentially risky SRH behaviours are getting the attention of more Jamaican adolescents enrolled in public schools.

ACKNOWLEDGEMENTS
We wish to thank students and their parents for making this study a reality. The Ministry of Education and principals at the various schools were extremely helpful to the process and we thank them. Finally, the University of Alabama at Birmingham provided part funding for this research and we are grateful for this assistance.

REFERENCES