Evaluating Bahamian teenagers about HIV

Drs Bonita Stanton and Sonja Lunn discuss a unique risk reduction and decision-making HIV intervention project underway in the Bahamas, and talk about integrating this into education programmes.

What led to the creation of the Focus on Youth in the Caribbean (FOYC) programme?

SL: It began when a team of vaccine researchers from Robert Gallo’s laboratory came to the Bahamas to explore the possibility of conducting a vaccine trial for HIV. Although the timing did not work out for the vaccine trial, the University of Maryland team happened to mention the Focus on Kids (FOK) programme, a risk reduction behavioural intervention targeting adolescents. Investigators at the University, including Dr Bonita Stanton, had developed this and were evaluating it through a longitudinal, randomised and controlled trial in Baltimore. Stanton’s research seemed to provide an ideal opportunity to conduct some concrete studies in prevention. We were fortunate to secure a grant for FOK researchers to come to the Bahamas and train a team in 1998, and that was the first pilot study of FOYC.

Could you provide a synopsis of HIV development in the Bahamas? To what extent do young people have access to testing facilities?

SL: In the 1980s there was a crack cocaine epidemic and due to the position of the 700 islands of the Bahamas in between South and North America, it was treated as trade route. The growth in cocaine use led to an increase in sex for drugs and sex with drugs. Following the crack cocaine epidemic, STI clinics documented an alarming increase in persons with genital ulcers. A fourfold increase in HIV infections was an indication that three epidemics (crack cocaine, genital ulcer diseases and HIV) together caused the Bahamas’ numbers to increase disproportionately.

Testing for HIV in teenagers is, by and large, carried out on girls who attend antenatal clinic. Random testing for young people under the age of 17 cannot be conducted without parental consent, so there is no mass testing of adolescents. As far as teenage boys are concerned, they are hardly tested.

How important is it to include intensive in-service training along with a detailed script or lesson plan for teachers?

BS: I think that this is tremendously critical. We found that teachers who are implementing the programme, and doing so in the manner described in the teacher’s training manual, have had longer and more complete training in FOYC. We also found that they are supported by their school administrators and the parents in the community, as well as have a resource person that they feel they can contact if they have a problem or question. Teachers who were not adequately trained, and do not have perceived or real access to resources are much less likely to continue, or are more likely to drop some of the difficult activities that are often really critical.

What results did you see from the longitudinal study involving schools in the Bahamas?

BS: The study lasted 36 months and included 15 elementary schools. We found that FOYC, both with or without the Caribbean Informed Parents and Children Together (CiMPACT) initiative, increased knowledge and condom use skills and intention over the study period. At 36 months we had enough sexually active youths to be able to see that FOYC+CiMPACT decreased unprotected sex compared to those who were in the control group. We also found that the knowledge and skills impact endured over 36 months. Indeed, we have now followed a subset of these youths into high school and we see that there is a continuing effect of FOYC. We don’t have a large enough sample to be able to look at actual condom use among the sexually active, but in terms of their condom use skills and knowledge, we are still seeing an effect when these kids are in grade 10.

To what extent will the results of this programme be of benefit to Caribbean HIV prevention research and the public health community?

SL: As far as the public health community is concerned, training parents as a means of making for healthier children and healthier communities is totally unique. Training students in the concept of decision making is also a very good public health concept and neither of these have been fully addressed in the Caribbean community. This programme is probably the first time that the comfort level, when talking about matters of a sexual nature, has really been raised effectively. That is a very important component of teacher efficiency and parental monitoring going forward. The ongoing national implementation of a programme demonstrated to be effective through a randomised controlled, longitudinal trial is unique. The fact that the national implementation effort is being studied to advise future efforts is even more unusual.
Engaging parents in prevention

A US-Bahamian team is collaborating to deliver a novel HIV education programme through schools called FOYC+CImPact. The researchers found the programme to be effective and now are evaluating national implementation efforts.

Globally, 34 million people were living with HIV in 2011. The World Health Organization has five key goals for addressing this significant public health concern, one of which is to reduce sexual transmission of HIV by 50 per cent by 2015. They are also working towards a substantial reduction in maternal deaths from HIV.

A unique programme underway in the Bahamas is focusing on this issue by combining HIV education with youth pregnancy teaching. Known as Focus on Youth in the Caribbean (FOYC), it delivers what is believed to be the first inclusive HIV and teen pregnancy prevention programme. The FOYC team, led by Dr Bonita Stanton, Schotanus Professor of Pediatrics and Vice Dean of Research at Wayne State University School of Medicine, has been working on this project for more than a decade. Their latest initiative has been the national implementation and evaluation of FOYC in combination with another programme called Caribbean Informed Parents and Children Together (CImPact), a teaching video for parents to strengthen and promote effective parental communication and monitoring skills.

FOYC+CImPact

FOYC+CImPact was adapted from ‘Focus on Kids’, a US programme set up in the 1990s which developed and evaluated an HIV prevention scheme targeting teenagers in public housing developments. Its success prompted the Bahamian Ministries of Health and Education to request assistance so they could develop a similar programme for youth and this has been established for grade six children. They wanted an education scheme with its foundations firmly rooted in robust parent-child communication and forward planning. The Principal Investigator of the project is the former director of the National AIDS Program and presently sits within the Ministry of Health. Implementation has largely been through the Ministry of Education.

A decade of collaboration, culminating in an effectiveness trial conducted in 15 government primary (elementary) schools with three years follow-up, demonstrated the programme to be effective in improving knowledge, protective behaviours, intentions and among those sexually active, increased engagement in protected sex. Accordingly, both Ministries of Health and Education have collaborated to implement the programme in grade six classes throughout the Bahamas and, together with the researchers, are conducting implementation research to determine factors associated with greater fidelity of implementation.

A RANGE OF INTERVENTION TOOLS

The team has used a number of different approaches and methods to engage with young people, including interactive games, storytelling, videos and a decision-making model known as SODA (Stop, Options, Decision, Action). One storyline they have found appealing to students is ‘The Family Tree’, where learning decision making is contextualised in a story about a relatable family. The students are involved in developing the family, with respect to their characters and relationships, as the programme evolves. This kind of approach has proven to be particularly effective at engaging them in the outcomes.

“The active involvement in the storyline which we promote through The Family Tree helps the students to understand that they also have choices, and the decisions they make will impact what happens to these characters,” observes Stanton. Dr Sonja Lunn, who is working alongside Stanton, describes how the SODA model is also developed as the project progresses using different activities, such as role play:

“In our culture role play is one of the most effective ways for children to really...
INTELLIGENCE

FIDELITY AND OUTCOMES OF NATIONAL IMPLEMENTATION OF FOYC+CIMPACT IN THE BAHAMAS

OBJECTIVES

The Bahamian Ministry of Health and the Ministry of Education, Science and Technology have collaborated to implement a nationwide Focus on Youth in the Caribbean and Caribbean Informed Parents and Children Together (FOYC+CIMPACT) programme to children in grade six to improve knowledge, protective behaviours and intentions. Recognising the importance and significance of a national implementation effort, the FOY research team was utilised to learn from and inform the implementation efforts. This implementation research is being conducted in three cohorts, each with two to three years follow-up over five years.

KEY COLLABORATORS

Bonita Stanton, MD, is Vice Dean for Research and Professor of Pediatrics, Wayne State University School of Medicine (WSU-M). Stanton has been collaborating with the Ministries of Health and Education in The Bahamas on HIV prevention for well over a decade • M Perry Gomez, MBBS, FACP is Minister of Health of The Bahamas, the Standing Chair of the Executive Council of the Caribbean HIV and AIDS Regional Training Initiative, and a member of the Executive Board of Pan Caribbean Partnership Against HIV and AIDS (PANCAP). He has collaborated with Stanton on adolescent risk reduction and HIV prevention since 2004 • Lynette Deveaux, BA is the coordinator of the Focus on Youth HIV Prevention/Research Program, Office of HIV/AIDS in the Bahamian Ministry of Health and a member of the executive management team of the National HIV & AIDS Programme. She has conducted HIV prevention intervention and implementation research in school and community-based-settings for over 10 years in the Bahamas.

WSU-M: Xinguang Chen, MD, PhD, Professor of Pediatrics; Xiaoming Li, PhD, Professor of Pediatrics and Director, Pediatric Prevention Research Center; Bo Wang, PhD, Assistant Professor, Department of Pediatrics; Veronica Koci-Dinaj, MA, a doctoral student, Department of Psychology, WSU

The Bahamas: Sonja Lunn, MBBS, a physician trained at the University of Edinburgh, is Associate Coordinator, FOYC, Ministry of Health, Commonwealth of The Bahamas.

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The results from the national implementation of Focus on Youth in the Caribbean and the Caribbean Informed Parents and Children Together programmes will be very important to the HIV prevention research and public health community in the Caribbean

externalise how they have to think through hypothetical situations,” notes Lunn. This is supported by working closely with the parents, including videos simulating real-life experiences where families exchange roles to look at a problem, explore the consequences of different options and then act out a chosen pathway.

All of the different tools and approaches used by the FOYC+CIMPACT educators are founded on Protection Motivation Theory, a behavioural model based on social cognitive theory. Its underlying philosophy is to understand the ways that risky behaviour (unprotected sex) can negatively impact a teenager and then to assess protective paths to mitigate this. In order for such a model to be successful the teenager needs to have the correct information available to them, as it is essentially a benefit versus risk approach. Lunn elucidates that they need to tread carefully because there are many cultural myths to consider: “We have to constantly, carefully and gently counter these when we are pointing out different options to parents and children”. By the end of the intervention the goal is that the young participants have been presented with a full picture regarding each of the decision-making components of the model and enabled to make informed decisions on their own behaviour. The researchers have found these approaches particularly useful for communicating the key messages across to pre-adolescents and older adolescents.

PARENTAL ENGAGEMENT

The intention of linking the two initiatives is to incorporate existing modules and trials, and to significantly increase parental involvement in the programme. “The current implementation of FOYC+CIMPACT is consistent with our earlier effectiveness trial. The only exception is there is some variation in the way we deliver parent engagement,” explains Stanton. This part of the scheme has been integrated through the Parent Teacher Association (PTA) which has assisted in increasing attendance at the evening sessions where small groups of parents have completed randomised effectiveness trials have been completed. Lunn believes that the value of this is in the way it promotes the important role of parents in monitoring boys: “The essential thing about FOYC is the concept that all children need monitoring, and we are successfully teaching parents how to do this”.

The researchers have also been observing teachers and recording any changes in behaviour and teaching following involvement in the initiative. This includes identifying how much support they feel they are receiving and the comfort level with teaching on these subjects. An anonymous student survey, as part of the Health and Family Life Education curriculum, allows education curriculum officers to monitor how the implementation of FOYC+CIMPACT is progressing and to evaluate how it is making a difference to their students.

GLOBAL INFLUENCE

The results from FOYC+CIMPACT will be very important to the HIV prevention research and public health community in the Caribbean. The group has prepared many different publications, including papers in peer-reviewed international scientific journals such as AIDS Behaviour and the International Journal of STD & AIDS. They have also presented at conferences, including those of the American Public Health Association and the Pediatric Academic Societies, and met with teachers and school administrators throughout the Caribbean. In addition, information about the programme has been included in a weekly radio talk show. Stanton points out that the project has global reach. For example, medical schools in the US are interested in FOYC’s work with medical students in the Caribbean: “In our own programme here, with both our resident and our medical students, we talk about the importance of behavioural interventions”. They are now looking forward to seeing how the programme evolves in the coming years and continuing to support families to educate their children about HIV and teenage pregnancies.