The WAVE (Well-Being of Adolescents in Vulnerable Environments) study

The WAVE Study is a two-phase research study designed to understand the factors that facilitate and hinder disadvantaged adolescents from obtaining the resources they need to secure good health.

The study is being led by Johns Hopkins Bloomberg School of Public Health, Department of Population, Family and Reproductive Health working with the Center for Adolescent Health and the Urban Health Institute and is part of AstraZeneca’s global community investment initiative, the Young Health Programme.
The two-phase study was undertaken in five locations: Baltimore (USA), Shanghai (China), Johannesburg (South Africa), New Delhi (India), and Ibadan (Nigeria). The site in Ibadan was funded by the Bill and Melinda Gates Foundation – the other sites were funded by AstraZeneca's Young Health Programme.

Background and Rationale

Much research has been done on easier to reach adolescents through schools and traditional family units, but to date there is limited data available on young people who don’t necessarily go to school or live in a typical home environment. Transformations in the world, which include changes in the global economy, education, family formation, and technology, are altering societies in every region, and in turn, are reshaping the contexts of adolescents’ lives. What is unknown is the extent to which these changes, regions and gender differentially impact young people’s health and their ability to obtain the resources they need to maintain health.

Study Description

The objectives of the study were to:
- Describe the health of adolescents in very economically distressed communities within the five cities, particularly sexual and reproductive health, mental health, substance abuse and physical safety
- Identify the factors influencing adolescents’ health within each city and across the sites

Phase 1

At each site, the study focused on a particularly distressed neighbourhood or area. The research stage included:
- In-depth youth interviews, focus groups and community mapping to obtain youth perspectives on their community and the health resources available to young people
- Key informant interviews with the providers and directors of youth-serving organisations asking about the issues facing youth in the community
- Photovoice projects that document community health issues through youth-led photography sessions

Phase 2

The second phase, completed in 2013, was built on the qualitative findings and included interviews with a representative sample of youths in each of the five locations. An innovative sampling approach, respondent driven sampling, ensured that adolescents without stable homes or out of the school system were included.

Key Findings

Across sites, there was a general consensus of the top health concerns among adolescents:
For adolescent girls: sexual and reproductive health problems are prominent
For adolescent boys: tobacco, drug and alcohol consumption was a huge problem, which further led to violence.

WAVE demonstrated that young people, both males and female, who grow up in vulnerable environments live with persistent fear, increased sense of vulnerability, less social capital and more environmental distress. These factors predispose to:
- more chronic mental health disorders
- more cigarette smoking and alcohol consumption
- more precocious sexual behavior with less protection against HIV, STIs and pregnancy

Adolescents who were most vulnerable (those who had the least amount of social support) were also the least likely to know where to access help or services.

Implications for Policy and Programmes

The findings from this study can be used by programme administrators and officials to understand better the health priorities of youth and to improve resources for severely challenged adolescents by incorporating their perspectives.