Encouraging more boys to get the HPV vaccination could lead to greater protection at the same cost, study suggests

By ACSH Staff — March 12, 2015

A new study from Duke University found that encouraging more boys to get the HPV vaccine might provide greater overall protection with a better cost-benefit profile. The study [1] was published in the journal *Epidemics*.

The study authors, including Duke mathematicians Marc Ryser, PhD, Kevin McGoff, PhD, and obstetrician/gynecologist Evan Myers, MD, MPH, and colleagues developed a computer model for assessing the impact of costs on immunization uptake. In order to do this, they compared the effectiveness of HPV vaccination campaigns with different cost scenarios. Factors considered in the cost scenarios included the price of vaccinating more people based on the per-dose price of the vaccine, as well as costs that could be required for educational programs to encourage more parents to vaccinate their children.

Their results suggest that public health programs may be able to protect more people at the same cost by allocating some funds toward pushing for more boys to be vaccinated, since the fraction of boys parents who are willing to vaccinate has not yet plateaued in the way that girls parents have.

As the authors note, the rate of HPV vaccination coverage has increased only slightly since 2012, and current coverage is unacceptably low [2]. A key reason for this is that many parents are hesitant to vaccinate their teenagers (especially girls) against a sexually transmitted infection due to concerns that immunity against the virus will encourage earlier sexual activity (however, studies [3] have [4] shown [5] that this is not the case).

Convincing these parents that the benefits of vaccinating their daughters greatly outweighs any perceived risks could be becoming increasingly expensive, Dr. Ryser stated, especially because many of the parents who have not vaccinated their daughters are strongly opposed to the vaccine.

"Along the spectrum of 'Whatever you say, doctor' to 'I don't believe in any vaccinations,' families who are currently unvaccinated are closer to the resistant end of the spectrum, and so it takes more work and costs more money to try to persuade them," Dr. Myers said [6]. For this reason, it may be more cost effective to target boys, who currently have a much lower coverage rate than
girls (about 14 percent of boys between the ages of 13-17 received all three doses of the HPV vaccine in 2013, compared to about 38 percent of girls).

"Making that trade-off would be beneficial to the entire population," said co-author Kevin McGoff of Duke, since boosting coverage in either sex means fewer people can transmit the disease to uninfected people. However, the authors add that more research is needed to quantify the true cost curves and make specific policy recommendations.