

World Cancer Day 2012: Together it is possible

Podcast, Dr Rolando Herrero, Head, Prevention and Implementation Group, Section of Early Detection and Prevention, [International Agency for Research on Cancer](#)

Could you give me an example to illustrate how “Together it is possible’ in the fight against cancer?

Thanks, I think that one of the best examples showing that together it’s possible is the recent development of the vaccine against human papillomavirus, a sexually transmitted virus that we call HPV. These viruses cause cancers of the uterine cervix, vulva, vagina, anus, penis and oropharynx. The most common of these is cervical cancer, which is diagnosed in 500 000 women every year and kills more than 250,000 women especially in developing countries, where screening programs are not place or are ineffective.

What did it take to develop this vaccine?

The development of the vaccine involved hundreds of scientist from many institutions around the world working for more than 3 decades and hundreds of thousands of people who generously participated in the research.

20 years ago we didn’t know the cause of cervical cancer, but after thousands of studies involving laboratory scientists, epidemiologists, statisticians, gynecologists, nurses, interviewers, field workers, drivers etc. we were able to clarify the role of HPV as the main cause of these cancers. Based on this knowledge another group of scientists developed a vaccine to prevent infection with HPV, which was then tested in tens of thousands of women and men in many countries. Now we have a highly effective tool to prevent this infection and potentially avoid many millions of cancers in the future

Is the vaccine in use? Can we expect that these cancers will disappear?

The vaccine is highly effective to prevent infection with the most frequent types of HPV, which cause about 70% of all cervical cancers and about 90% of the cancers in other organs that are associated with this virus. It is mainly recommended for use in adolescent girls before initiation of sexual activity to prevent the infection, which is very common, from the start. In some areas the vaccine is also given to boys. Three doses of the vaccine are currently recommended and there is no need for boosters. It is expected to provide long-term protection and to reduce the incidence of HPV-associated cancers.

To date, the vaccine is being given to adolescents mainly in developed countries, because it is relatively expensive, although it is clear that it is needed mainly in developing countries, where the disease is most common. Many institutions, including WHO and IARC are working with governments to make the vaccine available to all women.

Is the vaccine enough to control cervical cancer?

As I said, the vaccine is most effective in young girls before they are exposed to the virus. Therefore, its impact will not be seen for several years, and most adult women will not benefit from it. Therefore, countries need to continue or to initiate early detection programs to detect and treat precancerous lesions of the cervix. The knowledge about HPV has also permitted the development of new, very powerful tools for screening which are in the process of being implemented. In addition, given that the current vaccine does not protect against all the types of virus that cause cancer, screening will need to continue for some time among women who are vaccinated. The development of cancer takes many years and there is an opportunity to detect lesions that are completely curable if detected in time. All adult women need to be screened periodically to prevent cervical cancer.

What is the situation in developing countries?

As I said, vaccination is starting slowly in some countries, and the vaccine is now available at very low cost for some of the lowest income countries through GAVI, the Global Alliance for Vaccination. The vaccine will not solve the problem for adult women and screening programs need to continue. Screening is complex and expensive and IARC has been involved for many years in trying to develop simple and inexpensive methods for early detection. We have

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many new tools available to prevent many cancers and there is a need for governments and other institutions to work together to make it possible.

Dr Herrero, you've been involved many years in field work on HPV, particularly in Latin America: would you like to add a message to this presentation?

I would like to remind that cervical cancer is a disease that kills the poorest women in the poorest countries and is very closely linked to reproduction and sexuality. It kills relatively young women who have many children and who are usually the sole support of their household. Death from cervical cancer is usually very long and painful. This disease is a clear example of the extreme inequality that affects poor women, their children and their partners. On top of that it is preventable and therefore each case of cervical cancer is a shame and a failure of society.

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