Medical News

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Hepatitis B Vaccine Set for Introduction Into National Immunization Programs

At its session in January, the World Health Organization (WHO) Executive Board approved the recommendation of the Global Advisory Group of the Expanded Programme on Immunization calling for all countries with a prevalence of hepatitis B carriers of 8% or more to have the hepatitis B vaccine integrated into their routine infant immunization programs by 1995, and for all other countries by 1997. The recommendation was considered by the World Health Assembly in May.

The Global Advisory Group issued this recommendation at its first meeting in Antalya, Turkey, in October 1991. This marks the first time that targets for the introduction of hepatitis B vaccination have been set, although the participants of the meeting had called for the integration of the hepatitis B vaccine into the Expanded Programme on Immunization in statements issued in 1987, 1989, and 1990.

Approximately 2 billion persons have been infected by the hepatitis B virus. Of these, 350 million persons are chronically infected carriers and are at high risk of death from cirrhosis and primary liver cancer. Primary liver cancer is one of the main causes of death from cancer in men in many African, Asian, and Pacific Basin countries. Cirrhosis and primary liver cancer caused by hepatitis B infection account for 1 to 2 million deaths per year. The most common modes of transmission in developing countries are either child-to-child or mother-to-child during birth. In developed countries, the pattern of transmission differs, and most frequently, infection occurs among adults through occupational or lifestyle exposure.

Vaccines for hepatitis B have been available since 1982. More than 100 million people have been vaccinated with an outstanding degree of safety and efficacy. This is the first vaccine against a major human cancer. Until recently, because of its high cost, the vaccine was primarily used to immunize healthcare workers and other risk groups in developed countries. Over the past several years, the price of the vaccine in developing countries has fallen to less than $2 (US currency) for a full course of immunization, thus making it available to children in some developing countries.

Approximately 35 countries have a national policy of immunizing all infants with hepatitis B vaccine. These countries are primarily in Eastern and Southern Asia, the Pacific Basin, and the Middle East. The situation is different, however, in countries in Sub-Saharan Africa, with the notable exception of the Gambia. These countries are having difficulties in obtaining hepatitis B vaccine for economic reasons. Furthermore, it has not yet been added to the donors' procurements list, which currently provides vaccines approved by the Expanded Programme on Immunization against the following diseases: measles, whooping cough, tetanus, poliomyelitis, tuberculosis, and diphtheria.

The strategy is changing in the control of hepatitis B infection in the developed countries of western Europe and North America. When the vaccine became available in 1982, WHO, as well as many national groups, called for targeting high-risk groups in developed countries for a number of reasons. Hepatitis B infection, for example, is a major occupational hazard to healthcare workers. It also is a prevalent sexually transmitted disease as well as being rampant among intravenous drug users.

This "high-risk group" strategy failed, however, to control the hepatitis B infection in developed countries because, for the most part, only healthcare workers could be reached in significant numbers for vaccination. It is now recognized by many expert groups that only widespread use of the vaccine in children will control the disease, even in developed countries. Italy, New Zealand, and the United States now recommend hepatitis B immunization of all infants and, in fact, Italy has made hepatitis B immunization compulsory for all newborns.

WHO has been active in its efforts to control hepatitis B infection for many years. At the headquarters and the regional office levels, WHO provides support for demonstration projects, national programs, and transfer of technology to many countries.

However, the integration of hepatitis B immunization into the Expanded Programme on Immunization will have the greatest impact on the control of this disease. There are no technical impediments to the introduction of this vaccine. Therefore, it is clearly in the interests of the global community to identify the financial resources that will help to make the vaccine available to all of the worlds children.

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