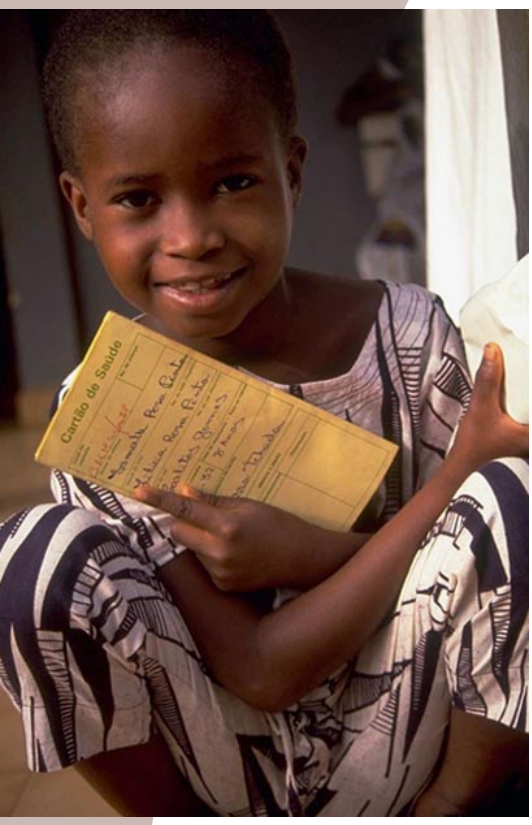

An African child holding her vaccination record card.
UNICEF/Guinea Bissau 92-0363/Pirozzi

Realizing the Full Potential of Childhood Immunization

How Health Professionals Can Make a Difference

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It is well-documented that childhood immunization saves lives–three to four million young lives per year. Studies commissioned by The World Bank and other agencies have demonstrated that immunization is one of the most cost-effective health interventions available today and that improved health is a major determinant of poverty reduction and national development. Yet the realities of current immunization programs often fall far short of their promise. This is especially true where immunization rates are low or where even strong programs do not routinely vaccinate children against yellow fever, hepatitis B, and other life-threatening diseases.

The Global Alliance for Vaccines and Immunization (GAVI)–with membership from WHO, UNICEF, The World Bank, the Bill and Melinda Gates Children's Vaccine Program, the Rockefeller Foundation, the pharmaceutical industry, and others–estimates that an additional four million children could be saved each year by increasing coverage with the six "traditional" childhood vaccines and adding new and underutilized vaccines to routine immunization programs. If those four million children had died during high-profile airplane accidents, the

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resulting public uproar would force politicians to take immediate action. Yet these preventable deaths continue year after year. If we cannot protect today's children with a cheap, time-tested vaccine against yellow fever, what hope is there that future children will benefit from more expensive vaccines when they become available–vaccines against HIV, malaria, and other infectious diseases?

There are multiple reasons why some immunization programs fail to reach their full potential, and why many have not yet introduced new or underutilized vaccines. These can be briefly characterized as 1) lack of resources, 2) lack of information, and 3) lack of motivation or advocacy.

Lack of resources

This is probably the barrier that is first and foremost in many people's minds; unfortunately it is also the barrier over which individual health care providers may have the least control.

The difficulty of paying for new vaccines has severely limited their widespread use. There are also concerns that the pharmaceutical industry is not prepared to produce enough vaccine to meet the world's needs. Fortunately, finance and supply problems are being given high priority by the global immunization community. New initiatives are being developed, including creation of regional and global vaccine funds to assist the poorest countries, negotiation with industry for lower prices for poor countries, and linking development loans and deep-debt relief packages with in-country investment in immunization.

Other resource barriers come to mind as well, including weak vaccine delivery infrastructures, uneven management, competent staff being transferred to other programs, and new staff being given responsibilities without sufficient training and support. Health system reform can add to these challenges as new, and unfamiliar, procedures and staff roles are defined and implemented. The good news about decentralization is that higher levels of decision-making authority can provide local clinicians with influence that they would not have under a centralized system. And this is where their advocacy efforts can make a difference.

Lack of information

For some diseases, such as hepatitis B, there is a large body of knowledge about disease burden and the cost-effectiveness of the vaccine. But the case is not

always so clear for other diseases, including *haemophilus influenzae* type B (hib), pneumococcus, and rotavirus. Decision-makers need to make difficult choices when allocating scarce health care resources—without convincing data about the relative economic and social costs of these diseases, they may not feel they can justify adding the vaccine to their program. They may also be uninformed about the vaccines themselves.

Lack of motivation (or advocacy)

If decision-makers do not understand the true value of immunization, they may be tempted to allocate funds to higher-visibility projects–like a new high-tech hospital in the capital–rather than to more cost-effective interventions like immunization. This is a resource allocation issue more than a true shortfall in resources. Sometimes people are tempted, or coerced, to fund public relations over public health, to choose curative services over preventive services, or to select the quick fix over longer-term (and more sustainable) solutions.

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In some ways, immunization can be a victim of its own success. If decision-makers believe that their program achieved the universal childhood immunization targets set for 1990, they may assume that the program is still functioning well today. But we know that without care and maintenance, immunization systems and equipment deteriorate over the years. In parts of the world, immunization rates have actually decreased over the last decade. Furthermore, now that new vaccines are available, the definition of a "fully immunized child" has changed. What seemed to be a strong program at the beginning of the decade may have become relatively weak, without people realizing it.

Perceptions of vaccine safety also change. When the risk of vaccine-preventable disease is high, people accept the low risk of adverse reactions. But over time, in countries with successful immunization programs, the disease becomes less common and perceptions change. The public, and some health professionals, may develop an increased fear of vaccines. This can lead to a situation in which only older physicians and grandparents remember wards full of children paralyzed by polio, for example, but where younger parents may question the need for polio immunization. Yet we know from experience that the disease will return if vaccination stops before the "bug" has been eradicated. Unfortunately, vocal opponents of immunization do not take this danger into account when they urge parents to avoid "unnecessary" or "unsafe" vaccines.

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It is by far the best and most cost-beneficial way to protect people, especially children, against suffering, disease, and premature death.

Immunization has another image problem as well. Because the "traditional" childhood vaccines are relatively inexpensive, some people have come to expect that all vaccines should be similarly cheap. They may fear that introduction of newer, more expensive vaccines is not feasible (even though those vaccines may in fact be very cost-effective in the long run).

How Health Professionals Can Make a Difference

Even if you are not on a national committee or a local decision-making board, there are steps that you can take to advocate for strengthening immunization programs and for introducing new and underutilized vaccines.

Learn all you can.

Become familiar with the overwhelming scientific evidence that immunization is very safe and effective, and that it is by far the best and most cost-beneficial way to protect people, especially children, against suffering, disease, and premature death. If you do not have the time to investigate the literature yourself, trust those doctors and scientists who have dedicated their professional careers to forming balanced judgements based on all the available, authenticated data. Do not be swayed by rumor or sensational media reports—people without advanced scientific knowledge can easily misinterpret study results or mistake hypotheses for facts.

Learn all you can about your local immunization program. Try to determine how "healthy" it really is. Are children being fully immunized and are they receiving the vaccines at the right age? Are the injections safe? Has the risk of accidental needle-sticks been minimized? Is the cold chain adequate? Is there adequate surveillance of vaccine uptake, adverse events, and disease incidence? Are public relations and health education efforts effective? Is there a working system to counter anti-vaccine rumors and misinformation? If not, alert those in charge of the program and urge them to make some changes.

If you think that hepatitis B or hib disease are problems in your area, find out what is known about the disease burden. Contact your health authorities, the WHO representative, and the local UNICEF office. Determine if there are research projects in which you could participate or that can share relevant data.

Immunization saves three to four million young lives per year. Stronger immunization programs could save twice as many children.
UNICEF/China 93-0078/Lemoyne

Investigate what is known about the disease in neighboring countries. Use the internet to gather information if you have access. But be careful—treat information from companies with caution, especially when they claim that their vaccine is superior to others.

Immunize your children and urge your friends to do so.

If you feel that there is a need for a new vaccine, first make sure that your own children are protected. Being able to say "I myself, and all of my children, are fully immunized" can be more powerful than any amount of reasoning or persuasion. Convince friends, colleagues, and patients who can afford to purchase the vaccine that they should also protect their children. Support for the vaccine in the private sector can be a first step towards public sector introduction.

Be sure to emphasize that vaccination is a prudent and live-saving intervention, and is necessary even when disease levels diminish in your community. In these days of global travel, we cannot be certain that the fellow sitting nearby did not recently step off a plane from an endemic area. Only when a disease has been completely and demonstrably eradicated worldwide can immunization be discontinued safely. This is what happened in the case of smallpox (the only disease ever to have completely removed from human experience). It is important to note that smallpox was eradicated through continuing, and thorough, immunization.

It can feel lonely being a single voice, but if you have been convinced, you can likely convince others.

Make improved immunization your personal crusade!

Don't sit on the fence.

Many health professionals feel that parents should be encouraged to make health decisions for themselves and for their children. That is true when the parents have all the information needed to make a wise decision, and when they are able to understand and use that information effectively. But problems arise if professionals simply hand out brochures or articles and expect people not trained in medicine to make sense of confusing, and sometimes contradictory, data—all in the name of "informed choice."

Health care providers are trained to form balanced, evidence-based judgements. They are paid to share their recommendations with patients. Doctors or nurses who do not assist patients with health care decisions may be shirking their responsibilities. If you believe in the value of immunization, don't hesitate to share your thoughts, feelings, and recommendations with parents in no uncertain terms.

Discuss, publish, teach, advocate!

It can feel lonely being a single voice, but if you have been convinced, you can likely convince others. Make this your personal crusade. Write articles for the local newspaper. Make yourself available as a guest on radio and television programs. If vaccine-preventable diseases are in the news, use the opportunity to call for increased political commitment to immunization. Discuss your concerns with government officials. Introduce yourself to program managers at UNICEF and non-governmental organizations like Medicins Sans Frontieres or Save the Children. Become active in national pediatric and medical associations and encourage them to formally recommend use of new vaccines. Take advantage of every opportunity to state your case. Don't neglect your peers—they may be able to learn from you as well. To reduce the chance of making an error, you may want to ask other knowledgeable colleagues to review and comment on your paper or presentation before you publish.

Fight ignorance and misinformation.

Help get the word out about the true value of immunization. It is increasingly common to find individuals and groups who criticize immunization because they misunderstand the science or because someone in their family was, unfortunately, the victim of a rare adverse event. These people can do a lot of damage, especially among non-scientists who may develop an unreasonable

fear of an intervention that could save their child's life. Although the scientific evidence for immunization is itself totally convincing, it is difficult to address an emotional argument (such as a weeping mother who blames her child's health problem on a vaccine) with public health logic. Many immunization advocates feel that only equally emotional responses can be effective in such a case. Counter allegations of vaccine-damaged children with reports of disease-damaged children. Remind colleagues and patients about the horrors of infectious disease before these life-saving drugs were commonly available. And if critics are holding you, or your health authorities, accountable for rare adverse events following vaccination, do not hesitate to hold the critics responsible for the suffering and death they may cause if they prevent children from being vaccinated.

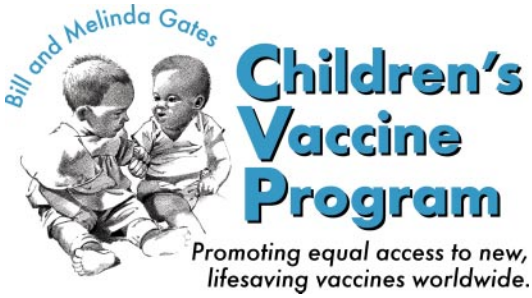
Every Effort Helps!

Global immunization is the greatest public health success in history, resulting in unprecedented progress in preventing childhood disease and death. In little more than a decade, a massive effort raised coverage rates from 5% of children worldwide in the late 1970's to a reported 80% in 1990! But as new health issues were given priority, some of the energy and excitement about immunization dwindled. Fortunately, that trend is being reversed with the inauguration of GAVI, generous grants from new funding sources, and renewed appreciation of the true value of immunization and the cost-effectiveness of even the more expensive, newer vaccines.

You can be part of the process. It may seem that immunization issues are being addressed at the national and international levels. But change often comes from the community, and public demand for stronger immunization programs can influence public policy. That demand can be encouraged by individuals, single voices, persistently making themselves heard, then joining with others to create a chorus that cannot be ignored.

For further information and for tools to help you in your advocacy efforts, visit the "Resource Center" of the Bill and Melinda Gates Children's Vaccine Program website: www.ChildrensVaccine.org

If you do not have web access, contact the CVP by mail at Bill and Melinda Gates Children's Vaccine Program, PATH, 4 Nickerson Street, Seattle, Washington 98109 USA or by email at info@ChildrensVaccine.org



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