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IN CONVERSATION

“HIV/AIDS needs a Multi-sectoral and Multi-partner Approach”

An interview with Sujatha Rao



Photo credit: UNAIDS/Ashok K. Vahie

Sujatha Rao

Sujatha Rao, Director General, National AIDS Control Organization (NACO) took charge recently in November 2005. This is her third stint in the Health Ministry. Previously, she was Secretary in the National Commission on Micro-Economics on Health from 1998 to 2003. She has also served as Secretary, Family Welfare in Andhra Pradesh. Sujatha Rao belongs to the 1974 batch of Indian Administrative Service and has studied at Miranda House, Delhi. Sankalp spoke to her about her plans for NACO and the HIV/AIDS situation in India.

What will be the priority areas for NACP-III? How will this phase build on the two phases of the national programme?

During NACP-I, the focus was mainly on developing an awareness regarding HIV/AIDS, strengthening management capacity for controlling the epidemic, building a vi-

able surveillance system and infrastructure development for blood safety. The National AIDS Control Organization was set up at the start of this phase.

These processes were strengthened during NACP-II and there was a shift in the focus

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SPOTLIGHT

Partnerships and Innovative Financing: A Way Ahead for Vaccine Research - Part I

PRANAY LAL

Vaccines are the most effective tool to control and eliminate infectious diseases. Since the early 20th century when new and improved vaccines were added to immunisation programmes, health indicators improved and economic growth made strides in many countries. In the past three decades or so, while infectious diseases were subdued

in many developing and developed countries, a few countries experienced a rapid re-emergence of infectious diseases that could be prevented by vaccines. Also, new infectious diseases like HIV and SARS that have emerged need both basic research and rapid development of vaccines.

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from raising awareness to changing behaviour. Decentralisation of service delivery to the states and management reforms were introduced. The National AIDS Prevention and Control Policy was formulated during this period. Interventions targeting high risk behaviour were expanded and inter-sectoral linkages established with development partners. During NACP-II the country also conducted the world's largest Behavioural Surveillance Survey (BSS) in 2001.

NACP-III will consolidate and build on these gains. The virus has spread from urban to rural areas and from a high risk to the general population, making prevention the focus along with care, support and treatment. Priorities and thrust areas of NACP-III will centre around:

- ❖ Strengthening state and district level responses through participatory planning at all levels so as to upscale and improve service delivery up to primary health care level.
- ❖ Evidence based planning and programme implementation
- ❖ Establishing a robust Monitoring and Evaluation system at all levels.
- ❖ Mainstreaming and building partnerships with public and private sectors
- ❖ Increasing focus on north eastern states, especially on Men having Sex with Men and Injecting Drug Users
- ❖ Greater attention on women, youth and adolescents.
- ❖ Prioritisation of prevention and its integration with care, support and treatment.

- ❖ Increased involvement and ownership of civil society including People Living with HIV/AIDS and promotion of Greater Involvement of People Living with HIV/AIDS
- ❖ Focus on operational research.

HIV infection and AIDS has now spread beyond the traditional six high prevalent states in India. How has NACO adapted its plans to increase outreach of both prevention and treatment and care programmes?

The epidemic has spread beyond the six high prevalence states. There are sub-national epidemics in various parts of the country with the evidence of high prevalence of HIV among both STD clinic attendees and antenatal clinic attendees. The HIV prevalence has seen a significantly increasing trend among STD clinic attendees according to 2004 estimates in 16 sites and among antenatal clinic attendees in seven sites located in Andhra, Maharashtra, Tamil Nadu, Gujarat, Pondicherry, Assam, Bihar, Chattisgarh, Delhi, Haryana, Himachal, Kerala, Orissa, Goa and Manipur. Micro analysis has revealed that there are 11 high prevalence districts in the country.

NACO has redesignated the so called traditional low prevalence states as vulnerable states based on parameters like migration, poor infrastructure and size of population. NACO is striving towards full coverage of the target population especially vis-à-vis core risk groups, migrants and young people. Early signs of sero-stabilisation have been observed in high prevalence states like Tamil Nadu.

NACP-III has plans to expand both prevention and care services to all states in the country and upscale services like Voluntary Counselling and Testing

Centres and Prevention of Parent to Child Transmission, bringing them up to at least the block or community health centre level.

The upcoming research conference in April 2006 being organised by NACO aims to develop a roadmap on HIV/AIDS. According to you, what are some of the research gaps and priorities that will emerge at the conference?

The purpose of organising the National Conference on Research in HIV & AIDS in collaboration with ICMR is to identify research gaps. Currently, there is no serious compilation of research in India in the field of HIV/AIDS. The conference will bring together eminent researchers who have been invited to submit abstracts. These comprehensive research papers will

The virus has spread from urban to rural areas and from a high risk to the general population, making prevention the focus along with care, support and treatment.

not only initiate a constructive dialogue and pinpoint gaps but also help build an evidence based and a user friendly knowledge bank on which the national response to HIV can be strategically designed. Since HIV/AIDS has spread over a vast and diverse field, the conference will cover four themes, namely, Communication, Behavioural and Social Sciences Research; Biomedical Research; Programme Research and Partnerships.

What are your views on integrated programmes addressing comprehen-

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sive health issues vis-à-vis vertical programmes that target specific health needs?

NACO's view is to continue with the vertical programme because HIV/AIDS is not only a health issue but a serious developmental issue which needs to be addressed through a multisectoral and multi-partner approach. However, health related HIV services at the district and sub-district levels need to be integrated to optimise results and resources. In view of the infrastructure existing in the country, it is becomes crucial that all programmes

Integration of HIV programmes with RCH and ICDS will be imperative to address the health needs of the country.

should converge in order to have desired results, especially below the district level. Integration of HIV programmes with Reproductive Child Health Programme and Integrated Child Development Services will be imperative to address the health needs of the country.

The India Health Report (authored by you along with Rajiv Misra and Rachel Chatterjee in 2003) emphasised that information, education and communication are key elements in stemming the epidemic. As the Director General, NACO, how do you plan to implement these recommendations in the existing programmes?

In the absence of a vaccine for AIDS, it is important that information on transmission, protection and care and support reaches the general population

and those at high risk. At the national level, NACO is stepping up its multimedia campaigns and advocacy to bring about increased awareness and resultant behaviour change, recognising the fact that everyone is vulnerable and at risk, specifically women and youth. Mainstreaming efforts which are being led from the highest political level with Prime Minister chairing the National Committee on AIDS will give a further boost to the programme.

To create greater awareness and involve each member of the community in dealing with HIV/AIDS; extensive campaigns have been launched in the print, electronic and folk media (national and regional) to reach different groups. Extensive advertising is done on occasions like World AIDS Day, Voluntary Blood Donation Day and International Women's Day. NACO along with State AIDS Control Societies, has also conducted Total Awareness Campaigns in states (24 so far) with intensive IEC campaigns covering the general population. Media sensitisation workshops have been held across the country to train journalists covering health and HIV/AIDS for accurate, sensitive and exhaustive reportage.

The GOI and NACO are partnering with IAVI to develop a preventive AIDS vaccine. How can AIDS vaccine R&D contribute to NACP-III strategy?

One of the objectives of NACP-III is to identify research in the areas of basic and clinical sciences in the next five years. AIDS vaccine trials are currently ongoing at Pune and Chennai. The Phase I trial with the AAV vaccine candidate was initiated on February 7, 2005 at the National AIDS Research Institute (NARI), Pune. Similar trials are ongoing at two international sites and the results will be collectively analysed and available by

2007. The Phase I trial with another vaccine candidate, MVA has recently been initiated at Tuberculosis Research Centre, Chennai. All these efforts demonstrate that India has the capability of playing a lead role in the development of an AIDS vaccine, the best hope to end an epidemic. If during NACP-III, the AIDS vaccine becomes available, it will be integrated through the outreach service infrastructure that has already been developed. ■

THE VACCINE TEXTBOOK

The map overleaf summarises current understanding of the global distribution of HIV-1 strains

Ten different epidemic patterns have been observed, as indicated by the different colours.

In the Americas and Western Europe, subtype B predominates everywhere but in eastern South America, where there is a substantial proportion of BF recombinants in addition to subtype B. In eastern Europe, subtypes A, B, and AB recombinant strains dominate the epidemic. Three different patterns have been observed in Asia: subtype C, a mixture of B, C, and BC recombinants, and a mixture of subtype B and CRF01_AE. The Australian epidemic is subtype B.

Africa shows the greatest diversity. Subtype C dominates the South and East, except for significant foci of subtypes A and D, as shown. West and West Central Africa harbor mainly CRF02_AG, alongside a complex array of other recombinants each present at low frequency. The most complex epidemic is in Central Africa, where rare subtypes and a wide variety of recombinant forms circulate without any discernible predominant strain.

The map is an overview that does not convey full details of HIV-1 subtypes and recombinants in any given location, and demarcates boundaries more distinctly than they exist in reality. A broad swath cutting across Northern Africa, the Middle East, and Central Asia (grey) is essentially devoid of data on HIV-1 subtypes.

EVENTS UPDATE

UNAIDS Honours the North East India Harm Reduction Network



Dr. S.I. Ahmed Chairman AIDS Prevention Society & Vice President North East India Harm Reduction Network with the UNAIDS Plaque presented by Dr Peter Piot, Executive Director UNAIDS and Under Secretary General United Nations along with his team

The Harm Reduction project of the AIDS Prevention Society (APS) drew special attention of the visiting UNAIDS team who were in the north eastern city of Guwahati for the Elected Representative Conference in November 2005. In recognition of their contribution to the global fight against AIDS, Dr Peter Piot, Executive Director of UNAIDS and Under Secretary General, United Nations honoured the North East India Harm Reduction Network with a UNAIDS Plaque.

The APS initiative has played a key role in establishing the North East India Harm Reduction Network. Supported by Rajiv Gandhi Foundation, APS has been working for HIV/AIDS prevention with injecting drug users, truckers, sex workers, migrants, street children and youth in north east India since 1991. APS also implements an integrated health services project for prevention of parent to child transmission of HIV with five voluntary counseling and testing cen-

tres in Guwahati. APS is a member of the National Group on Vaccine Initiatives (NGVI), which is a group of six nationally networked NGOs that has come together with the primary objective of increasing community understanding and participation in the AIDS vaccines programme.

Dr Piot interacted with a large number of peer educators of the Harm Reduction Project. The peer educators explained the details about the needle syringe exchange programme and various services offered for the management of health problems among the injecting drug users. While appreciating the comprehensive programmes of APS, Dr. Piot said they should be scaled up and replicated for wider coverage in the country. In his written comment he congratulated APS for the pioneering and expansive work and described APS as “a model in the north east for the whole country”.

World Economic Forum Annual Meeting 2006

The World Economic Forum ended its Annual Meeting 2006 at Davos with participants pledging to take action this year towards reducing the imbalances in the global economy and the global environment to assist in the smooth and continued rise of the developing world.

Poverty, stigma and gender relations are the drivers of the AIDS epidemic and the fundamental factors to be addressed, according to Dr Peter Piot, Executive Director of UNAIDS. “AIDS reveals fault lines in our societies,” Piot said, “and any sustainable response requires addressing these fissures, while taking into account local beliefs, values and traditions. In the long term, we have to change the norms and social behaviours that are the driving forces of the disease.”

At the Forum, rock star Bono launched Product RED, an economic initiative designed to deliver a sustainable flow of private sector money to the Global Fund to Fight AIDS, Tuberculosis and Malaria. It is the first time that the world’s leading companies have made a commitment to channel a portion of their profits from sales of specially-designed products to the Global Fund to support AIDS programmes for women and children in Africa.

RED presents a new and profitable way of doing business by harnessing the partners’ brand-building expertise



Pop Star Bono

while generating a new income stream for the Global Fund. International brands including American Express (founding partner), Gap and Giorgio Armani are the launch partners. They have designed products that will take on the RED mark and will be available from 1 March 2006. “RED is about doing what you enjoy and doing good at the same time,” explained Bono. ■

◀ *Contd. from 1*

The pharmaceutical industry has played a key role globally in developing and manufacturing new health technologies. But high development costs and lack of assured markets have made research for vaccines less of a commercial priority. The private sector has been deterred from greater investment not only because of scientific uncertainties but also by market risks. The need for vaccines is greatest in countries that are least able to pay; in addition, firms worry that political pressures would compel them to provide vaccines at very low and unprofitable prices¹.

It takes hundreds of millions of dollars and more than 20 years of research to produce a marketable vaccine. In the past, once companies had recouped costs in developed countries; vaccines were made available at lower prices for developing countries². There continue to be delays of many years between the introduction of a new vaccine in developed countries and its uptake in developing countries but this needs to change. In a globalised world, infectious diseases are increasingly crossing

borders rapidly, overwhelming national and global health systems. It is important that this lag (in time from discovery to access to all) is reduced, while fairly rewarding research.

Public Private Partnerships and investments

Roy Widdus, former Coordinator of the Global Forum for Health Research's Initiative on Public-Private Partnerships for Health, defines these partnerships for health as '*arrangements that innovatively combine skills and resources from institutions in the public and private sectors to address persistent global health problems*'³. Simply put, PPPs are partnerships between governments, private sector, academia and civil society. Since the 1990s, PPPs have dramatically improved the landscape of research and development in neglected diseases, and have broken the stalemate of low investments in research in neglected diseases.

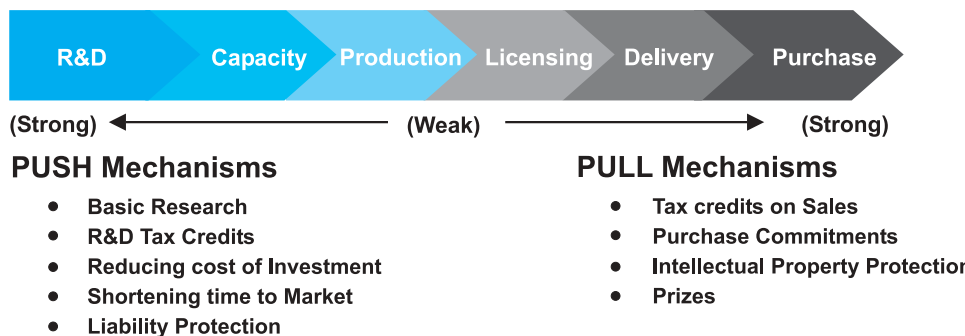
PPPs currently support thousands of scientists from research institutes, academia, pharmaceutical and biotechnology companies. Many are working on the R&D of products that meet the

health needs of the developing countries. According to the Global Alliance for Vaccines and Immunisation Fund (formerly The Vaccine Fund), the track record to date shows that this new approach to research and development works: within the PPP framework, there are over 8 diagnostics, 45 new drugs, 8 microbicides and 50 vaccines in development addressing HIV/AIDS, malaria, tuberculosis, pneumonia, diarrhoeal diseases. Diseases that are globally less prevalent such as kala-azar and Japanese encephalitis but are of immense importance to India and South Asia region are also being developed through PPPs. Combined, they have the potential to impact billions of lives. Sixteen products are already in or entering into late-stage clinical trials. Some of these could be available within the next five years⁴.

PPPs, in concert with donors and governments have worked to develop innovative financing mechanisms to spur research. To ensure rapid development of new technologies, PPPs are working on mechanisms for securing predictable, long-term financing and ways to strengthen health systems in resource-poor countries. Championing a balanced set of 'push' mechanisms (see diagram) such as adequate and sustained funding for R&D by governments with 'pull' mechanisms like the International Finance Facility for Immunisation (IFFIm) check, advanced market commitments (AMCs) and other new measures, can further increase engagement by the private sector and encourage research and development. ■

To be continued...

Incentives for vaccines



Source: Robert Hecht, Senior VP, Policy, IAVI (2004).

¹ IAVI, Advance Market Commitments: Helping to accelerate AIDS vaccine development, Policy Research Working Paper July 2004, available at www.iavi.org/file.cfm?fid=35155, as viewed on January 31, 2006

² Anon, Introducing Advance Purchase Commitments-A package for immunisation, Department for International Development (DFID), Consultation Note DFID Version 3 150605, available at : <http://www.bvgh.org/documents/DFIDAPC2-pager.pdf>, as viewed on January 30, 2006

³ Roy Widdus, quoted in Reich Michael R. ed., 2002, Public-private partnerships for public health, Harvard series on population and international health, Harvard Center for Population and Development Studies, Cambridge, Massachusetts, USA, pg: 6.

⁴ Vaccine Fund, <http://www.vaccinefund.org/default.aspx?page=g8nationsletter.html&lang=fr>, as viewed on Jan, 31, 2006

IN FOCUS

India's Preventive AIDS Vaccine Trial at Chennai

The Indian Council of Medical Research (ICMR), the National AIDS



Principal Investigator
Dr. V.D. Ramanathan

Control Organization (NACO) and the International AIDS Vaccine Initiative (IAVI) announced a Phase I AIDS vaccine trial to be conducted at the Tuberculosis Research

Centre (TRC) in Chennai in February 2006. The investigational vaccine candidate, TBC-M4, is designed as a preventive vaccine to protect people who are not infected with HIV from contracting HIV/AIDS. YRG Care, a premier non-profit HIV referral centre, is also a key partner responsible for community mobilisation and recruitment of volunteers.

IAVI and the biotechnology firm Therion Biologics Corporation (Cambridge, Massachusetts, USA) collaborated on the development of the AIDS vaccine candidate utilising MVA vector technology. Therion, with the assistance of Dr Sekhar Chakrabarti, an Indian scientist from the National In-

“There is growing consensus within the scientific and public health community that vaccines are by far the most effective and efficient means of controlling most infectious diseases. This is a proud moment as India takes another step in the global search for a preventive AIDS vaccine.”

Union Minister of Health and Family Welfare, Dr. Anbumani Ramadoss

stitute of Cholera and Enteric Diseases, Kolkata, designed the candidate and manufactured doses of it for initial clinical trials. The vaccine uses a recombinant Modified Vaccinia Ankara (MVA) as a vector to carry six HIV 1 sub type genes. It is a live vector and is not known to replicate in humans as it is a highly weakened form.

The Chennai study is a small-scale trial, with a primary aim to evaluate the safety of the product. Goals also include

gathering preliminary data on the ability of the vaccine candidate to stimulate immune responses against HIV/AIDS. A total of 32 volunteers will be enrolled and this trial will be conducted over 18 months.

This is the second such trial being conducted in India jointly by the Government of India and IAVI. The first Phase I trial was initiated at Pune in February 2005. Researchers are pursuing multiple vaccine candidates simultaneously because it is not certain which of many possible designs may prove effective. Professor N. K. Ganguly Director General, ICMR, echoed the need for such a strategy, *“The pipeline of promising vaccines is growing, yet several clinical trials will be needed worldwide to select the best candidates for further development stages. Along with India’s first AIDS vaccine trial – launched in Pune last February — the Chennai study will play an important role in advancing the global search for viable strategies to combat HIV/AIDS”*. ■



Counseling at TRC

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IAVI is a scientific organisation founded in 1996 whose mission is to ensure the development of safe, effective, accessible, preventive HIV vaccines for use throughout the world. IAVI focuses on four key areas: accelerating scientific progress; education and advocacy; ensuring vaccine access and creating a more supportive environment for industrial involvement in HIV vaccine development.

IAVI's financial and in-kind supporters include the Bill & Melinda Gates, Rockefeller, Alfred P. Sloan and Starr foundations; the governments of Canada, Denmark, the European Union, Ireland, the Netherlands, Norway, Sweden, the United Kingdom and the United States; multilateral organisations such as the World Bank; corporate donors including Becton, Dickinson & Co., Continental Airlines and DHL; leading AIDS charities such as Crusaid, the Phoebe W. Haas Charitable Trust B. and other generous corporate and individual donors around the world.

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