# GOVERNMENT OF INDIA HEALTH AND FAMILY WELFARE LOK SABHA

UNSTARRED QUESTION NO:1342 ANSWERED ON:30.11.2012 HIV AIDS RELATED RESEARCH Karwariya Shri Kapil Muni;Thakur Shri Anurag Singh

### Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

- (a) whether the Government is aware that Human Immuno Deficiency Virus (HIV) has been going a process of evolution in the country since the past decade;
- (b) if so, the details and implications thereof along with the steps aken/proposed by the Government to combat this threat;
- (c) the details of the HIV/AIDS related research projects undertaken and the financial aid provided to the concerned institutes during each of the last three years and the current year, State/UT-wise;
- (d) whether National AIDS Research Institute (NARI) has developed and conducted clinical trials of AIDS vaccination in certain States;
- (e) if so, the details thereof along with the outcome thereof indicating the financial and technical assistance received from the international agencies for developing the said vaccination; and
- (f) the time by which the vaccination is likely to be ready for mass use?

## **Answer**

### MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (SHRI S.GANDHISELVAN)

- (a): As per inputs given by the Department of Health Research; there is no definite evidence available as yet that HIV virus has been evolving in the country since decade. But a recent article published in the Journal of Biological Chemistry reports increase in HIV strains with additional NFkB sites in the promoter region. (Source: Bachu et al, Multiple NF-?B sites in HIV-1 subtype C LTR confer superior magnitude of transcription and thereby the enhanced viral predominance. J. Biol. Chem. jbc.M112.397158. First Published on November 6, 2012. In press.)
- (b): As per inputs given by the Department of Health Research; There is no evidence at this point of time that the evolution of HIV strains within the country would pose any additional threat.
- (c): National AIDS Control Organisation has given a strong emphasis to strengthening of research activities under the programme. Research is a vital component of Strategic Information Management Unit under National AIDS Control Programme. Research in HIV/AIDS is promoted and coordinated by National AIDS Control Organisation in collaboration with Indian Council of Medical Research (ICMR). National AIDS Control Organisation focuses on ensuring translation of research outputs into programmatic action and policy formulation.

The amount spent on research and development by National AIDS Control Organisation on research projects undertaken and financial aid provided during the last three years is as follows:

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Year Amount spent (In Rs.)

2009-10 Rs 2,00,76,137

2010-11 Rs 86,67,193
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2011-12 Rs 79,42,024

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2012-13 till date Rs 1,54,62,124
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Total Rs 5,21,47,478
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The same information pertaining to different institutes - State & UT -wise is provided in Annexure I. As per inputs provided by Department of Biotechnology (DBT) under Ministry of Science & Technology, the amount spent on research projects undertaken and financial aid provided during the last three years is as follows:

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Year Amount spent (In Rs.)

2009-10 Rs 3,75,85,000

2010-11 Rs 4,72,34,200

2011-12 Rs 46,44,94,600

2012-13 till date Rs 13,82,15,200

Total Rs 68,75,29,000
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The same information pertaining to different institutes - State & UT -wise is provided in Annexure II.

As per inputs provided by the Department of Health Research (DHR), the amount spent on research projects undertaken and financial aid provided during the last three years is as follows:

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Year Amount spent (In Rs.)

2009-10 Rs 7,43,89,389

2010-11 Rs 8,62,28,019

2011-12 Rs 1,28,932,243
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2012-13 till date Rs 8,58,88,685

The details pertaining to different institutes - State & UT -wise is provided in Annexure III.

(d) & (e): As per inputs given by the Department of Health Research; Yes, National AIDS Research Institute (NARI) has conducted two HIV vaccine trials in Pune.

These trials were conducted by National AIDS Research Institute (NARI), in collaboration with International AIDS Vaccine Initiative under a tripartite agreement between National AIDS Control Organisation-Indian Council of Medical Research and International AIDS Vaccine Initiative. National AIDS Research Institute (NARI) received a total grant of Rs. 6,60,81,568/- for this.

Details and outcomes of these vaccine trials:

#### 1. AAV based Vaccine [A001]

This trial involved 24 volunteers who received vaccine and 6 as placebo. The vaccine was found to be safe and there were no adverse events associated with vaccine. However, the vaccine had poor immunogenicity and very low level of immune response was detected in small percentage of vaccine recipients. The vaccine could not be taken forward.

### 2. Prime and Boost Trial [P001] with DNA vaccine for priming and MAV for boost

This trial had two arms – one receiving DNA vaccine for priming and MVA for boost in comparison with other arm where recipients received MVA both for prime as well as boost. The vaccine was found to be safe and there were no significant side effects. The vaccine induced good antibody response and cytotoxic T cell response. DNA-MVA arm showed better response than MVA alone arm. The issue related stability of MVA vaccine needs to be resolved before considering taking this vaccine forward.

(f): According to the Department of Health Research; It is not possible at this point to predict when vaccination is likely to be ready for mass use.