



Immunization Facts: Adult Need Their Shots

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There is a common consensus among public health managers that disease prevention is the most cost effective option to protect and promote health of populations and immunization is the key to achieve the same (1). Although much emphasis has been laid on the immunization of younger generation of late, yet not all are being benefited by immunization policies adopted by the health sector. Childhood immunization policies are primarily directed against six killer diseases with Hepatitis B added lately to the list (2). Indian Academy of Pediatrics and Private Practitioners are increasingly calling Hepatitis A, Chickenpox, Haemophilus Influenza B and Typhoid compulsory for children (3). The Global Alliance for Vaccine and immunization (GAVI) also is working to promote rapid development of new vaccines and greater access to both current and new vaccines (4).

The economically productive large adult populations, however have been denied the benefits of personal protection owing to either non-availability of vaccines when they were growing up or vaccination not being first priority of the health sector. Even those who received the vaccines were not protected to the fullest extent because of less effective vaccines available at that time. Protecting adults through vaccination has never been considered a preventive strategy likely to have a great impact on population health. This is true even for developed economies although some efforts have been made in this regard in USA and Europe. It follows that the consideration that only children need vaccination is bereft of any scientific logic.

Infectious diseases still contribute to a large burden of morbidity, mortality and disability in spite of years of efforts particularly in less developed economies. Though adults are less susceptible to fall prey to traditional infectious agents, emergence of HIV/AIDS and re-emergence of

Malaria and Tuberculosis world over has complicated prevailing fragile health scenario. This coupled with inadequate immunization against these infections result in substantial and unnecessary costs both in terms of hospitalization and treatment and in lost income (5). Also, the probability of exposure to infectious agents have increased manifold owing to globalization and increasing travel opportunities both within and across countries.

It's better to call this as a state of "Vaccination dilemma". The paradox is even visible in policies enunciated from time to time by the World Health Organization. Though WHO considers childhood vaccination as first priority, it keeps on issuing lists of essential vaccines for adults as well (6). The situation with Govt. of India is also not very different. It is ironical that in the absence of any set protocol for vaccination of adults, it keeps on spending crores on clinical trials with pharmaceutical companies (7, 8). Muraskins (1995) aptly demonstrated the conflicts between public health and profit motives of western pharmaceutical companies in the development of Hepatitis B vaccine (9). The practitioners too have inadequate knowledge about adult immunization policies. Further, the intended beneficiaries, the adults, too are unable to get right advice from any quarter since no conscious efforts is being made by health sector in disseminating appropriate information about the use and availability of adult vaccines. Cost of vaccination, lack of safety of vaccines and poor vaccine delivery services add up to the existing chaos.

Thus, there is an urgent need to address the problem of adult immunization. Adult immunization practices and policies should be introduced formally in undergraduate and post-graduate curricula to start with. Further, continuing medical education programmes for practitioners, intensive efforts to create population

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Table 1: Recommendations For Adult Vaccination

S.No.	Vaccine	Guidelines
1	Tetanus	-Booster of Td vaccine every 10 years for all adults , max five boosters.
2	HepatitisB	-3 doses at 0,1,6 months for all seronegative adults, health care workers & travellers in endemic areas
3	HepatitisA	-2 doses are given 6 months apart to people with chronic liver disease, travellers to highly endemic areas adults & adolescents living in areas of high endemicity
4	Typhoid	-Single dose of 0.5ml to serongative travellers to highly endemic areas,to be repeated in 3 years.
5	Influenza	-Annual vaccination for persons >65 years of age, people with cardiopulmonary diseases, health care workers & household contacts.
6	Chickenpox	-One dose of Chickenpox vaccine to those adults who have no prior history of disease or immunization against Chickenpox.
7	Pneumococcol	-5 yearly vaccination to persons > 65 years of age, people with chronic obstructive pulmonary disease, splenectomy, CHF and health workers
8	Antirabies	-Pre exposure vaccination at 0, 7&28 days to veterinar ians, animal handlers & wild life officers etc. Post exposure vaccination on contact with suspected or confirmed rabid animal given on 0,3,7,14&28 days.

Adapted from Recommendations of Advisory Committee on Immunization Practices (ACIP)-2008 and Tailored to our Local Needs (10)

awareness, provision of vaccines at costs people can afford and improved logistic support in service delivery mechanism could help mitigate the adult suffering. Special provisions for adults involved in certain occupations or planning to travel abroad need to be made. Tertiary care medical institutions can make a start in this regard by setting up a unit for immunization advice. The services can then be extended to secondary and primary care institutions in a phased manner.

References

- Hillman Alan L , Schwartz J , Stanfor Bloom, Bernard.S, Fendrick A mark. American college of Physicians. *Annals Internal Med Health* 1993; 0003:4819.
- Park K.In: Parks Textbook of Preventive & Social Medicine, 18th Edition. Banarsidas Bhanot, Jabalpur, India.2005.pp.103-04.
- Immunization schedule , As recommended by the Indian Academy of Pediatrics.http://www.healthorchid.com/content/consumer/immunization_schedule_c.asp. Accessed on, June,2008
- Michael H M, Robert E B, Anne J M. International Public Health, Diseases, Programs, systems and Policies. 2nd Edition. Jones and Barlett publishers, Sudbury 2006;136,669.
- Fedson DS. Adult Immunization, Summary of the National Advisory Committee Report. *JAMA* 1994;272:1133-37.
- Essential vaccines.<http://www.int/emlib/MedicineDisplay.aspx?language=EN&MedicineIDName=110%40diphtheria%20vaccine>. Accessed on June,2008
- Larry M, Maddour MD. Whole virus H5N1 vaccine trial. *Journal Watch Infectious Diseases*. (News Letter), June 11, 2008
- Vijayaumar V, Hari R, Parthiban R, Mehta J,Thyagarajan SP. Evaluation of Immunogenicity and safety of Genevac B:A new recombinant Hepatitis B vaccine in comparison with EngerixB and ShanvacB in healthy adults. *Ind J Med Microbiol* 2004 ; 22(1):34-38.
- Muraskin W. The war against hepatitisB, Philadelphia. University of Pennsylvania. Press, in IPH : 675.
- Isahak I . Adult Immunization-A neglected issue in Southeast Asia. *South East Asian J Tropical Medicine & Public Health* 2001;31(1):173-84.