

TDAP EFFICACY WANES RAPIDLY

A recently published study analyzed the efficacy of the Tdap vaccine in preventing pertussis in adolescents. In the US, acellular pertussis vaccines replaced whole-cell vaccines for the 5-dose childhood vaccination series in 1997. A sixth dose of pertussis-containing vaccine – Tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis, adsorbed (Tdap) – was recommended in 2005 for adolescents and adults. Despite high Tdap vaccine coverage among adolescents, California experienced a large pertussis outbreaks in 2010 and 2014. Researchers examined these outbreaks, and on the basis of 1207 reported cases of pertussis, they found that Tdap vaccine provided moderate defense against the illness during the first year after vaccination but not much longer. Immunity waned during the second year, and little protection remained 2 to 3 years after vaccination. Tdap vaccine effectiveness during the first year after vaccination was 68.8%, decreasing to 8.9% by ≥4 years after vaccination. During each year of outbreak, incidence dropped off precipitously among the age groups composed of children who would have received the whole-cell pertussis vaccine. Presumably vaccination in childhood by the whole cell vaccine provided long lasting immunity to persons in contrast to the acellular vaccine. (*Pediatrics March 2016*)

THE CASE FOR EUTHANASIA

The case of Aruna Shaunbag, the nurse who lay in a vegetative state in a Mumbai hospital between 1973 and 2015, had thrown up many questions to the medical and legal communities as well as society as a whole. In 2011, the Supreme Court had made a landmark judgement widely appreciated for its nuanced handling of this complex issue. It provided clear guidelines on the following questions: When can a person be declared brain dead or a persistent vegetative state? What are the rights of this person? What are the responsibilities of the care providers?

The Union Government has now formed a Constitutional bench of the Supreme Court which is examining a draft bill proposed by the Law ministry. It is developing a legislative framework to answer whether patients who are terminally ill and beyond the scope of medical revival can be allowed to die with dignity. It is also examining whether living wills could be allowed. Living wills are authorizations made by persons in a

healthy state saying they need not be put on life support systems in the event of their going into a persistent vegetative state or terminal illness.

The experts have not agreed on active euthanasia because of the obvious possibilities of misuse. But it supports passive euthanasia or withdrawal of life support subject to safe guards and fair procedure. (*The Hindu 2 February 2016*)

SMOKE-FREE MOVIES

The WHO has called upon governments to rate movies based on their inclusion of scenes portraying smoking. It is quite clear that after the tight restrictions on advertisements, movies now remain one of the few widespread mechanisms by which children and teenagers are lured into smoking. In the United States, studies have shown that 37% of new adolescent smokers have been influenced due to cinema. In 2014, 44% of all Hollywood movies and 36% of movies rated for children portrayed smoking. The US Surgeon general declared that adult rating of films with smoking scenes would reduce adolescent smokers by one-fifth and prevent one million tobacco-related deaths in children and teenagers. The WHO smoke-free movie report has also recommended that movies with tobacco imagery may be made exempt from public subsidies.

(<http://www.who.int/mediacentre/news/releases/2016/protect-children-from-tobacco/en/>)

ZIKA VIRUS VACCINE FROM INDIA

Bharat Biotech has created history of sorts by becoming the first company to file a global patent for two candidate vaccines against the Zika virus. Eighteen months ago, a group of researchers from Bharat Biotech started work to develop a traveler's vaccine against three mosquito borne viruses – Chikungunya, Japanese Encephalitis and Zika. In July 2015, they had developed two vaccines against the Zika virus – a recombinant vaccine and an inactivated vaccine. The 'Zikavac' is ready for preclinical trials as is their Chikungunya vaccine. It is expected that women will be the first beneficiaries of a successful Zika vaccine, followed by adults because of the purported risk of Gullain Barre Syndrome in adults due to the Zika virus. (*The Hindu 4 February 2016*).

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