

OPTION B+ TO CUT PERINATAL HIV TRANSMISSION

The Union Government has announced that Option B+ will be implemented in India to reduce perinatal HIV transmission. In this option, all HIV positive women will be put on three antiretroviral drugs, lifelong, regardless of CD4 counts or WHO stage of HIV. Newborns will be started immediately on once daily nevirapine (10 mg below 2.5 Kg and 15 mg above 2.5 Kg) till 6 months of age. Caesarean sections will no longer be required and all mothers will be strongly advised to breastfeed their babies. Exclusive breastfeeding will be recommended for 6 months and complementary feeding will be advised from 6-12 months.

Option B+ is expected to bring down risk of perinatal transmission from around 30% in patients without intervention to below 5%. Previously used Option A included short-course zidovudine during pregnancy and extended infant nevirapine during breastfeeding for women with CD4 >350/ μ L and no evidence of WHO stage 3-4 disease, with lifelong anti-retroviral treatment (ART) for women with advanced disease. Option B meant ART through pregnancy and breastfeeding regardless of CD4 or disease stage, with continuation after weaning for women with advanced disease. Maharashtra, Karnataka, Andhra Pradesh and Tamil Nadu have already adopted the new regimen and other states will follow. (*The Hindu 20 February 2014*)

NOW STEM CELL USE IS MALPRACTICE

The ICMR and Department of Biotechnology have issued fresh guidelines according to which every use of stem cells in patients outside an approved clinical trial will be deemed malpractice. A decision has been taken to drop the word 'therapy' to emphasize that stem cells are not part of standard care. Stem cell use is at present only approved for hematopoietic stem cell reconstitution. The action has been taken to curb malpractice where stem cell is being offered as a new tool to cure incurable diseases. There are other ethical issues involved too. India's *in vitro* fertilization (IVF) clinics are considered an established source of embryos for research to which foreign scientists come for supplies. So when Embryo Stem Cell (ESC) line research was established at Reliance Life Sciences Laboratory and the National Centre of Biological Sciences in 2001, its associated publicity forced the government to announce a crack down on the trade to counter the international view of India as 'an embryo surplus' nation.

What is proposed is a system of review and monitoring of the field based on the National Apex Committee (NAC) for Stem

Cell Research and Therapy and, at the institutional level, Institutional Committees for Stem Cell Research and Therapy. All research, including clinical trials, would require the prior approval of, and be registered with, the NAC. Prohibited areas of research include reproductive cloning, implantation of a human embryo into the uterus after *in vitro* manipulation, and transfer of human blastocysts generated by somatic cell nuclear transfer (SCNT) into a human or nonhuman uterus. Studies of chimeras and the creation of a zygote by IVF or SCNT with the specific aim of deriving a hES line are restricted but not prohibited. (*The Hindu 24 February 2014; Mittal S. Stem Cell Research- The India Perspective. Perspect Clin Res. 2013;4:105-7*)

THE 'SUPER AMMA' STORY

The new heroine in several villages in the Chittrakoot district in Andhra Pradesh is 'Super Amma'. This fictitious character was developed by researchers of the London School of Hygiene and Tropical Medicine and St John's Research Institute, Bangalore. They invented her as part of a controlled trial of a public health campaign to encourage hand washing. Eight hundred thousand children aged below 5 years die of diarrhea every year. It is well established that hand washing with plain soap halves the incidence of both diarrhea and pneumonia. So far, efforts to change hand washing behavior have used information about health benefits and risks, and met with little success. Often the problem is not the lack of knowledge but the reluctance to adopt a new habit or change an old one.

In this study published in *The Lancet Global Health*, emotional drivers instead of knowledge based messages were used. The multicomponent intervention comprised community-based and school-based events including an animated film about a savvy rural mother ('SuperAmma') who teaches her beloved son hand hygiene as part of good manners and comedy plays about 'SuperAmma' and a disgusting uncle. Six months after the campaign was launched, there was a 37% increase in handwashing in the intervention villages while rates remained fairly unchanged in the control villages. What was interesting was that rates increased equally in households with and without access to water within their compounds. The findings show that creative interventions based on drivers of behavior change can be effective and potentially scalable. (*The Lancet Global Health 2014; 2:e145-54*)

GOURI RAO PASSI
gouripassi@hotmail.com