# Probiotics in Clinical Practice: To Use or Not to Use!

Indian drug market is flooded with probiotics and synbiotics (combination of prebiotics and probiotics). The pharmaceutical companies are aggressively marketing them claiming its efficacy in various clinical conditions especially in treatment of diarrhea. It is important to remember that only few probiotics with specific strains such as *Lactobacillus rhamnosus* GG, *L. reuteri* and *Sachromyces boulerdii* have sufficient grade A evidence in reducing the duration of viral diarrhea and prevention of antibiotic associated diarrhea considerably(1). Ironically, none of bacterial probiotics available in Indian market mention about strain specificity, thus limiting their usefulness.

IAP National Task Force 2006 revised guidelines also do not recommend use of probiotics in management of acute diarrhea till further evaluation regarding its efficacy is established in our

settings(2). Moreover, use of probiotics in preterm, low birth weight baby and immunocompromised children is fraught with risk of bacteraemia, endocarditis, and fungemia (3). The prescriber must consider their efficacy and safety based on evidence based medicine before recommending them to children.

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# **Punishment for Refusing OPV**

Can the parents or caretakers of the children upto 5 years of age be penalised by the local authority or prosecuted in the court of law if they refuse administration of OPV during Pluse Polio Immunization campaign? The Hindustan Times dated 14th August 2007 had published a news item: "Refuse polio drops, lose power and ration cards". It was reported from Jaunpur, Uttar Pradesh and stated: "In what appears to a first in Uttar Pradesh the polio drive is sending a clear message to the people: refusing polio drops will cost them dear." On the orders of the Sub-divisional magistrate punishment was meted out to two families whose ration cards were cancelled and power supply disconnected for refusing OPV for the children in their families.

Can such punitive action be taken against a doctor who does not administer OPV to those children who have received IPV to avoid any risk of VAPP in close immunocompromised contacts?

#### **Yash Paul**

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### Reply

Dr Yash Paul has raised very important issues related with human rights. As to the first part of his query, we understand that Pulse Polio Immunization campaign is a part of national effort to eradicate crippling polio disease. All national health programs needs to have persuasive tone and should never have coercive tenure. Coercion may arrogate with fundamental right enshrined in Article 21 of Constitution of India.

The Article 21 protects the right of life and personal liberty of citizen not only from the Executive action but from the Legislative action also. A person can be deprived of his life and personal liberty if two conditions are complied with, first, there must be a law and secondly, there must be a procedure prescribed by that law, provided that the procedure is just, fair and reasonable(1). Violation of this fundamental right can be redressed by Hon'ble High Courts of State as well as Hon'ble Supreme Court under their writ jurisdiction. Action of SDM is ultra vires of Article 21 of Constitution of India and person affected can invoke Writ jurisdiction of High/Supreme Court in form of a papauris (paupers suit) to get ration card and power supply restored.

As to the second part of his query, the answer is 'No'. Patients with immunodeficiency disorders including HIV, combined immunodeficiency, abnormal Immunoglobulin synthesis, Leukemia, Lymphoma/Neoplasm, drug induced immune-suppression or radiation therapy should receive IPV vaccine(2). IPV is also recommended in household contacts of people with immunodeficiency/altered immune status and OPV should not be used in such people(3). IPV has no risk of VAPP, circulating Vaccine Derived Polio Virus (cVDPV) in immuno-

compromised host(4). Hence, such a doctor is not interfering with National polio eradication program and no such action can be taken as child immunized with IPV is neither at risk himself nor puts anyone else at risk of polio.

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## Iron Folic acid Supplementation

The article on 'Impact of Iron-folic acid supplementation on cognitive abilities of school girls in Vadodara' has thrown light into a very relevant medical and social issue(1). *Table* I depicts the mean initial and final hemoglobin levels. However, the most important data on how many were anemic and what was the severity of anemia is not included. It is possible that some girls with significant anemia might be having anemia due to causes other than iron deficiency. Also the comparison between the anemic and the non anemic in the cognitive tests is also

lacking. These observations can be eye opening data in this respect.

I also have a serious doubt as to how weekly or twice weekly iron can be given in those with diagnosed anemia. Weekly or twice weekly iron is recommended for anemia prophylaxis and not therapy. As per standard recommendations, they need daily iron therapy. Daily iron is documented to be superior to weekly administration(2). A therapeutic dose of 4-6 mg/kg of elemental iron in divided doses is required for optimum amount of iron in iron deficiency anemia(3). How is the administration of weekly iron justified in those with documented anemia?

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