using OPV during pre-eradication era [2]. The new IAP Immunization timetable has slots for Hepatitis-B and Measles vaccines at 6 and 9 months, respectively. Hence, the new polio schedule will not entail extra visits.

3. It is true that there is no efficacy trial of available rotavirus vaccines in the country and efficacy low in other developing countries. But considering the huge burden of rotavirus disease in India, even a low efficacy should translate in to significant number of lives saved. Higher vaccine efficacy is desirable but should not delay use of an effective public health tool. Regarding proper strain match, it should be noted that there is significant amount of cross-protection offered by the rotavirus vaccines, and even RV1 provided comparable protection against non-vaccine strains in the African trial [3].

4. There is lack of epidemiological data on the incidence of mumps and rubella in different ages in the country but it is a common knowledge that all these diseases are more common amongst school age group of children. According to most recent unpublished data of the last 18 months (till August 16th 2012) acquired through IAP's IDSurv passive reporting system from pediatricians, school age group has now emerged as the commonest affected group for varicella and mumps in the country. Fifty-five percent of all varicella cases and 65% of all mumps cases are in the age-group of 5-12 years.

The second dose of MMR vaccine is not a "booster"; it is intended to produce immunity in the small number of persons who failed to respond to the first dose. If we delay these 'boosters' to 10 years of age, a significant number of children will be exposed to these diseases, will experience breakthrough diseases (varicella and mumps), and vaccine efficacy especially against varicella will be compromised. Besides, it is more convenient to 'catch' susceptible children before school entry than at later age.

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**REFERENCES**

1. Meeting of the Strategic Advisory Group of Experts on immunization, Geneva, April 2012 - conclusions and recommendations. Available from: http://www.polioeradication.org/Portals/0/Document/Aboutus/Governance/IMB/6IMBMeeting/2.11_6IMB.pdf Accessed on September 2, 2012.
2. WHO. Polio vaccines and polio immunization in the pre-eradication era:WHO position paper. Wkly Epidemiol Rec. 2010;85:213-28.
3. Madhi SA, Cunliffe NA, Steele D, Witte D, Kirsten M, Louw C, *et al*. Effect of human rotavirus vaccine on severe diarrhea in African infants. N Engl J Med. 2010;362: 289-98.

## OPV for Children Who Have Received IPV

According to the Consensus Recommendation on Immunization 2012 [1] the Committee recommends birth dose of OPV, three primary doses of IPV at 6, 10 and 14 weeks, followed by two doses of OPV at 6 and 9 months. It further states that since IPV administered to infants in EPI schedule (*i.e.*, 6 weeks, 10 weeks and 14 weeks) results in suboptimal seroconversion, hence a supplementary dose of IPV is recommended at 15-18 months. Will administration of two doses of OPV not enhance the levels of antibodies generated by three doses of IPV so that supplementary dose of IPV at 15-18 months be eliminated?

The Committee further states that there is considerable evidence to show that sequential schedules that provide IPV first followed by OPV can prevent VAPP while maintaining the critical benefits conferred by OPV (*i.e.*, high levels of gut immunity). In case subsequent administration of OPV is to provide 'critical benefit of gut immunity', it would be interesting to know the reasons why children from the countries which have switched over to IPV only are being deprived of 'critical benefit of gut immunity'.

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1. Consensus Recommendations on Immunization and IAP Immunization Timetable 2012. Indian Pediatr. 2012;49:549-64.

**REPLY**

As stated in the consensus recommendations also, this schedule is an interim arrangement to take care of VAPP cases and also to pave the way to ultimately all-IPV

schedule. The OPV is retained mainly for two reasons, first, its propensity to induce superior intestinal mucosal immunity to decrease the spread of WPV, and secondly, to avoid confusion regarding OPV at community level that would have resulted had we gone for complete cessation of OPV use since the vaccine is exclusively employed in ongoing SIAs and RI in India. Though it's true that 'effective' mucosal immunity is not visible at ground level, especially in the two endemic hotspots, yet there is no trial that demonstrates superior or even comparable intestinal immunity of IPV in India. The ongoing trials may have some answers and may ultimately settle the issue.

There is limited experience of using IPV in routine immunization schedules in developing countries. Where IPV has or is being used (for example, in Egypt, states in the Gulf Cooperation Council, Malaysia, South Africa, and Yogyakarta Province, Indonesia), it is usually administered in a sequential schedule with OPV. This schedule is also in accordance to WHO policy which states that "IPV alone may be considered an alternative to sequential schedule only in countries that have the lowest risk of both WPV importation and WPV transmission [1].

The last two doses of polio vaccines i.e. IPV at 15-18 months and OPV at 5 years are retained primarily to accord long-lasting protection to individual vaccinee. We may be erring on 'over-immunizing' an individual, but in the absence of any indigenous trial and experience, this was the safest path to choose.

The main reason why industrialized countries have switched over to 'all IPV' schedule and deprived their children the 'critical benefit of gut immunity' is safety concerns of OPV. As stated earlier, we are providing the best of both the vaccines till the 'services' of OPV are still available while minimizing the damage inflicted by it.

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**REFERENCE**

1. WHO. Polio vaccines and polio immunization in the pre-eradication era:WHO position paper. Wkly Epidemiol Rec. 2010;85:213-28.

## Shakespeare's Honourable Men and Conflicts of Interest

Thank you for all the work put into the consensus recommendation on Immunization and IAP Immunization Timetable 2012 published by the IAPCOI [1]. However, I humbly request the consideration of the following while utilizing the information provided.

This consensus states that it is primarily for pediatricians in office practice. The reality is, that the term "office practice", actually means "private practice", where we need to generate profit to sustain our lifestyles, which is not unethical itself, but is dependent upon patients who can pay. Methods utilized to market vaccinations are sometimes controversial with aggressive practices to market vaccines of questionable public health significance, the huge margins of profits and ethics of physician-industry relationships [2]. However, the article states that "Competing Interests" of authors were stated as "None" though, as physicians, we have much to gain especially from vaccine prescriptions with excellent margins of profit [3]. Our Journal states that competing interest for a manuscript exists when authors have ties that could inappropriately influence his or her judgment, whether or not judgment is in fact affected. It is a matter of professionalism and integrity for legitimate conflicts of interest to be recognized and for the aware reader to consider the implications of information derived from such sources [4,5]. In addition, it is difficult to be convinced that members of the IAPCOI (and many others not on the committee) have never received any support, tokens of appreciation and grants of any sort from the vaccine Industry. It appears that they remain convinced that accepting support has no role to play in their decision making process though they are human. I'm sure that even the Industry will disagree with them. Since this is a consensus and data is scarce, it is necessary to reveal Conflicts of Interests. Surprisingly, there were special invitees 9 out of 10 of which are from the Vaccine Industries present at sessions which is certainly a gross conflict of interest or have I got everything wrong?

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