Dilemma of Academia and Organizers in IAP

Two recent communications in the pages of *Indian Pediatrics* [1,2] very eloquently underline the significance of the title above. While I urge the readers of the journal to read both the articles fully, I refer to lines relevant to the context of the present communication.

Editor's Desk [1] discusses (or proposes as a "must"), inter alia, "need for a "code of conduct" on which academia-industry relationship must subsist." They further add at the end of the article, "Practitioners need to take charge of updating their knowledge *themselves (italics mine!)*. The information fed by the pharmaceutical industry (*do we include Vaccine companies too*?, *again italics are mine*) needs to be seen, smelled, tasted and scrutinized for its content; before digesting it finally!

President's Page [2] states, inter alia, at the end of the last but one paragraph, "We are thankful to the vaccine manufacturers *viz*. GSK, MSD, Sanofi and Wyeth-Pfizer for their magnanimous scientific grants and *more importantly for their non-interference, non-influence in the science,...*" (*italics, mine*)

When both the views, each authentic in its own right, get paradoxically juxtaposed in our own Journal with a very high impact factor of 1.04 [3], how should a practitioner take up a stand *vis-à-vis* his/her child patients and their non-affording parents, especially when more and more pediatricians in the market pool seem to be assuming role as "vaccinologists" or "vaccine specialists" following the training from National Vaccicon ToT, rather than clinicians following Immunization committee of IAP (IAPCOI), which brings out its instructional publications of consensus every year. Incidently, on the President's Page, there is no mention of this committee's role in huge success (or otherwise!) of Vaccicon on *all parameters and also the flood of congratulatory and complimentary messages (italics mine, yet again).*

RAMESH D POTDAR
Hony Secretary
Centre for the Study of Social Change;
Past President, Indian Academy of Pediatrics,
rdpotdar@snehamrc.com

REFERENCES

1. Gupta P, Vashishtha VM. The games industry plays. Indian Pediatr. 2012;49:699.
2. Agarwal RC. Expanding the academic platter…. Indian Pediatr. 2012;49:701.
3. Gupta P, Mishra D. Impact Factor 2011 and random musings. Indian Pediatr. 2012;49:609.

Neonatal Resuscitation Program: 2010 Guidelines – Points to Ponder

The new NRP 2010 guidelines on neonatal resuscitation were published more than two years ago [1]. There are lot of variations in practice because of some difficulties in interpretation and feasibility of certain recommendations. We would like to point out few issues which need clarity.

First, the concept of "observational care" has been removed. As per the new algorithm, those neonates who do not require positive pressure ventilation after initial steps of resuscitation and do not have labored breathing or persistent cyanosis subsequently are supposed to be given to the mother for "routine care". Though this is true for term neonates, preterm neonates need close monitoring, irrespective of resuscitation needs and many of them may require special care. Though it is implied that such newborns will be transferred from delivery room to an appropriate area, the algorithm does not explicitly state so. Since the algorithm is meant to be used by all levels of workers, it needs to be clarified that routine care in these neonates will be provided in a step down nursery or a intensive care unit depending on the maturity level and the anticipated problems.

Second, due to the removal of the question pertaining to meconium staining of the amniotic fluid, there is some confusion about the approach to be adopted for meconium stained liquor. The NRP now states that in a baby not breathing, watch for meconium staining of skin or meconium in oral cavity to decide about ET suction. However, this may not be easy for all level of workers. As a result, a non-vigorous baby will not receive endotracheal (ET) suctioning and instead would go

through the initial steps. This is in contrast to the recommendations of ET suctioning for non-vigorous babies. Even though there is no evidence to support or refute the practice of ET suctioning in non-vigorous babies, the current NRP guidelines do not actually recommend a change in the practice. It will be useful to actually test and validate the above changes in the algorithm in the field for different level of health personnel. Third, assessment based on color has been removed and is replaced by the use of pulse oximetry for the assessment of oxygenation. It is also stated that "oximetry be used when resuscitation can be anticipated, when positive pressure is administered for more than a few breaths, when cyanosis is persistent, or when supplementary oxygen is administered". NRP recommends switching over to 100% oxygen if no improvement occurs in room air after 90s of resuscitation. If pulse oximeter has to be attached in these selective situations, which will be about 30s after birth, it may take up to 90 more seconds for the pulse oximeter signal to appear [2]. By that time the resuscitation will be over in majority of the cases and one will not get a chance to titrate FiO2 with the blender as per the set SpO2 limits. Fourth, NRP recommends switching over to 100% oxygen in case the heart rate falls below 60bpm. However, it does not mention about absence of improvement indicated by persistence of heart rate in the 60-100 range even after 90s of resuscitation. It would be prudent to recommend an increase in the oxygen concentration even in the latter situation.

Developing nations contribute to the majority of the neonatal mortality and morbidity due to perinatal asphyxia. Yet, most of the delivery rooms and resuscitation corners in these countries are not equipped with air-oxygen blenders and pulse oximeters [3]. It would be a mammoth, long drawn and expensive task to ensure availability of air-oxygen blenders and motion-resistant low perfusion latest generation pulse oximeters in all delivery areas. There is an urgent need to develop consensus guidelines for our own country keeping in mind the ground realities, and also to produce low cost blenders and pulse oximeters.

NEERAJ GUPTA AND S VENKATASESHAN
Neonatal Unit, Department of Pediatrics, Advanced Pediatric Center, PGIMER, Chandigarh 160012, India. venkatpgi@gmail.com

REFERENCES

1. Kattwinkel J, Perlman JM, Aziz K, Colby C, Fairchild K, Gallagher J, *et al.* American Heart Association. Neonatal resuscitation: 2010 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. Pediatrics. 2010;126:e1400-13.
2. O'Donnell CP, Kamlin CO, Davis PG, Morley CJ. Feasibility of and delay in obtaining pulse oximetry during neonatal resuscitation. J Pediatr. 2005;147:698-9.
3. Lee AC, Cousens S, Wall SN, Niermeyer S, Darmstadt GL, Carlo WA, *et al*. Neonatal resuscitation and immediate newborn assessment and stimulation for the prevention of neonatal deaths: a systematic review, meta-analysis and Delphi estimation of mortality effect. BMC Public Health. 2011;11Suppl 3:S12.

Diagnostic Dilemma in Overlapping Congenital Syndromes

Chromosomal or segmental aneusomy are an important cause of congenital malformations, emphasizing the need for cytogenetic evaluation. Many congenital malformations, especially those with multi-systemic anomalies present overlapping phenotypic features that could partly be attributed to multiple gene deregulations. Moreover, the expressivity of phenotypic features of a particular syndrome could vary extensively among the patients and hence, request for a specific test becomes difficult as observed in the present case.

A 9½-months-old, phenotypically female child was born at term to non-consanguineous parents with a birth weight of 2700g. She presented with developmental delay and showed microcephaly (<2SD deviation), hypotonia, truncal ataxia, depressed nasal bridge with long philtrum, mild frontal bossing and hepatomegaly of 2.5 cm. Echocardiogram revealed large Ventricular Septal Defect with pulmonary arterial hypertension and a small patent foramen ovale. There was no submucus cleft palate. Developmental assessment suggested a moderate delay with motor development of 4.7 months and mental development of 5.5 months. Other investigations such as TORCH, serum calcium and parathyroid hormone levels were within the normal range. There was no ultrasonographic evidence of renal, urethral and bladder anomaly. Based on these constellations of clinical symptoms and signs, a clinical assessment of 22q11.2 deletion syndrome encompassing DiGeorge syndrome (DGS) was made.

DGS is a common congenital disorder, where pathogenesis has been linked with chromosome 22q11.2