

Changing Trend in Decision Makers

This is with reference to the report by Prakash *et al.*(1). It is very interesting, though expected, to note that the grandmother is the sole decision maker regarding maternal and child health.

I have done a study on feeding practices in infants in rural areas of Udupi Taluka. Udupi is a coastal place in South Kanara District of Karnataka. One hundred children between 8 to 12 months were selected. They hailed from low socio-economic status and majority of families had monthly income of 600 to 1000 rupees. About 90% of mothers and 95% of fathers had some amount of education and 30% had higher education also. Majority (70%) of mothers were housewives and 20% were labourers. Around 70% were from joint families and 95% had institutional deliveries.

This sample is comparable to the one

taken by Prakash *et al.*(1) with the difference of better parental education, socio-economic status and exposure to health education (as this area is under the project of Community Medicine Department of our hospital.)

It was found that in 58% of cases, the mother and in 23% cases a doctor or nurse was responsible for deciding the weaning age, type, amount and frequency of weaning foods or any change therein. Only in 19% of cases, the grandmother was the deciding person.

This study concludes that parental education, socio-economic status and health education have a great role to play in child care.

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Use of Warm Air Dryers in Neonatal Intensive Care Units

Hospital acquired infections represent a major source of morbidity and mortality for patients in the intensive care units(1). It is well known that effective handwashing can prevent

nosocomial infections(1,2). It is also important that hands are dried thoroughly after a wash. Since use of a single common towel is not recommended, various other methods such as autoclaved paper and cloth napkins, paper towels and electrical warm air dryers are available for drying hands. There are very few studies(3) comparing the effectiveness of these various methods of hand drying and hence the following preliminary study was carried out at the Neonatal

Intensive Care Unit of the Kasturba Hospital, Manipal.

A total of 26 personnel working in the unit were enrolled in the study and were randomly reallocated after handwashing with liquid antiseptic solution (Gammaphene Johnson and Johnson) to dry their hands with autoclaved cloth napkins or electric warm air dryer (Automats). Cultures of both hands were done in all personnel before and after handwashing and then again after drying hands. All cultures were done using sterile swab sticks. The stick was rubbed thoroughly over the palms, back, side of hands, webs of fingers and the nail beds. Hand washing was done for three minutes as per the recommended routine(4). The swab sticks were immediately plated on to nutrient agar and the organisms identified as per the routine techniques used in the Microbiology Department of this hospital.

Twenty five of the twenty six (96.15%) cultures were positive before handwashing. Coagulase negative *Staphylococcus aureus* was grown in 23/26 (92%). Coagulase positive *Staphylococcus aureus* in one (3.8%) and *Klebsiella* in one (3.8%) case. Cultures of the electric air dryer blast and autoclaved cloth napkin were sterile but the tap water used for handwashing grew *Acinetobacter*. Table I shows the culture characteristics after wash and after drying with autoclaved cloth napkins or with an electric warm air dryer.

Drying of hands following washing assumes great importance in NICU's especially because over the last decade, septicemia with water borne organisms like *Citrobacter* and *Acinetobacter* have

been reported in the Indian literature(5,6). The methods currently available in most NICU's for drying hands include autoclaved paper (or newspaper) and cloth napkins. Ready availability of unlimited amounts of autoclaved material for drying hands can be a problem. Electrical warm air dryers were thus installed in our unit and found to be a good alternative. Ansari *et al.*(3) have reported that electric warm air dryers produced the highest reduction in bacterial counts, irrespective of the washing agent used. The present study found a marginal reduction in culture positivity after drying with the air dryer as compared to drying with autoclaved cloth napkins, though the results were not statistically significant. At any rate,

TABLE I- Culture Characteristics After Drying with Autoclaved Napkin and Electric Warm Air Dryer (n=26).

| Organisms | No. +ve after wash | No. +ve after drying |
|-------------------------------------|--------------------|----------------------|
| A. Using autoclaved napkin | | |
| Coagulase —ve <i>Staphylococcus</i> | 10 | 10 |
| Sterile | 2 | 2 |
| B. Using electric dryer | | |
| Coagulase -ve <i>Staphylococcus</i> | 7 | 6 |
| <i>Acinetobacter</i> | 2 | 1 |
| Sterile | 5 | 7 |

p = 0.084 (not significant).

drying with the dryer did not produce colonization with any new organism. Air dryers have the advantage of ready availability and unlimited use. The average time taken for drying hands is about 30 to 45 seconds which might be considered too long in certain situations but this is outweighed by the other obvious advantages. Continuous electricity is essential for routine use of hand dryers which might be a disadvantage in certain units. Concerns about the air blast stirring up the atmosphere with consequent increase in bacterial counts have to be substantiated with well designed studies.

In conclusion, electric warm air dryers appear to be good alternatives for drying hands in NICU's.

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4. American ACademy of Pediatrics, Guidelines for Perinatal Care, 2nd edn, 1988, p 120.
5. Christo GG, Mathai J, Venkatesh A. Citrobacter sepsis in neonates—A clinical and epidemiological study. *Indian J Pediatr* 1990, 37: 781-784.
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ORS: Controversies and Perspectives

This is with reference to the above titled editorial(1). The learned author deserves appreciation for such an informative and well balanced article; however, there are some inaccuracies which

are difficult to overlook and as such are pointed out here.

1. Sucrose has been shown to yield on hydrolysis equal concentrations of glucose and galactose(1) (p 897) which is factually incorrect. We all know that a sucrose molecule on hydrolysis yields a molecule each of glucose and fructose (not galactose).

2. The claim(1) 'ORS sachets are