

Positive Deviance Determinants in Young Infants in Rural Uttar Pradesh

Sir,

Positive deviants (PD) are those poor families that manage to rear well nourished infants by practicing specific positive behaviours that may be currently less practiced in the similarly poor community but at the same time culturally acceptable and affordable for percolation.¹ Limited literature is available on identifying and applying PD determinants in behaviour promotion in rural India² and practically none in rural western Uttar Pradesh (U.P.). Hence, the present study was undertaken. Between June-November, 2004 in three socioculturally backward villages (population: 8,000) in Agra district, U.P. a total of 100 families with infants (0-<6 mth) were identified. From these families, using standard of living index³, 67 were categorized as poor families. Of 67 poor families, in 25 of them, the infant's weight-for-age Z score was >-1 of NCHS reference median.⁴ These 25 families were considered PDs and remaining 42 were considered as others. Breastfeeding (BF), family support, psychosocial care and maternal self-efficacy were studied

in 67 families using interview, home observation⁵ and elicitation to identify factors significantly associated with PD. A total of 40 variables were subjected to statistical treatment - first, chi-square test and then significant variables ($p < 0.1$) were subjected to binary logistic regression to calculate odds ratio with cornfield 95 percent confidence interval which was then adjusted for significant socio-cultural factors.

Factors significantly associated with PD are delineated in Table 1 and were: (1) third or earlier born infant, (2) BF initiated timely and prelacteals avoided, (3) BF eight times or more in 24 hrs, (4) maternal autonomy in infant health related decision making, (5) family happy on childbirth, (6) mother expresses her ideas freely and keen to learn new approaches to ensure better nutrition for her infant, (7) infant visibly clean, clad and not hypothermic to touch (soles and abdomen warm) and (8) high maternal self-efficacy in practicing positive BF practices. Antecedents that enabled a mother to practice positive behaviours self-efficaciously were: (i) family members

TABLE 1. Factors Contributing to Positive Deviance

Factors	In Univariate Analysis ($P < 0.05$)*	In Logistic Regression OR (95% C.I)	
		Unadjusted	Adjusted**
Socio-cultural factors	1. Birth order <3	2.6 (0.7-7.2)	1.5 (1.1-2.2)
	2. Maternal literacy	-	-
Breastfeeding	1. BF initiated timely	5.8 (0.8-42.6)	-
	2. Avoiding prelacteals	9.2 (1.3-64.9)	4.9 (0.2-99.0)
	3. BF >7times/d	3.1 (1.1-8.7)	2.0 (0.6-6.5)
Family Support Provided to mother	1. Maternal autonomy in decisions	7.5 (2.4-23.2)	7.3 (2.1-25.5)
	2. Paternal involvement in child care	-	-
	3. Family happy on child birth	3.7 (1.2-11.4)	2.8 (0.8-9.9)
Psychosocial Care and HOME environment	1. Mother expresses her ideas freely	3.0 (0.9-9.5)	2.8 (0.8-10.8)
	2. Mother keen to learn new things	3.8 (0.9-9.5)	2.9 (0.9-9.4)
	3. Baby clean and clad	3.0 (1.0-8.0)	2.0 (1.6-7.0)
	4. Baby not hypothermic (touch method)	10.5 (1.8-60.4)	8.8 (0.9-80.9)
Self-efficacy	High in PDs. Moderate/low in others	-	-

* $p < 0.05$ chi-square/fisher's test, ** Adjusted for maternal literacy and birth order

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especially grandmother (*i.e.* mother-in-law/older women of household) strongly perceived positive benefit of the behaviour and advised/supported the mother to follow it, (*ii*) mother's self-perception of the benefit of the behaviour either through observation in community or past experience, (*iii*) benefit centred around child and easing household chores, (*iv*) tradition (s) favoured positive behaviour adoption and *v*) positive reinforcements by a government doctor/nurse and T.V. programs.

In 21 of 25 PD families, grandmothers were both facilitators of positive practices and willing to become voluntary community health workers (CHWs). They were facilitated to form a CHW group for improving maternal and child health in their villages, define group objective and using social maps demarcate their catchment areas (1:20 households/grandmother) to ensure reach to entire community. Their technical and counselling capacity was built and PD behaviours were incorporated within other maternal-infant care technical messages. Later, within their catchment areas, if there were pregnant women, CHW counseled them with her mother-infant care pictorial flip book through home visits, ensured timely immunization, assisted delivery and visited the mother-baby dyad weekly until infancy. The CHW group met monthly to collectively solve problems they were facing in their work, counsel their aged mother-in-laws who due to age old traditional beliefs did not follow recommended practices and sing health songs on their tunes to refresh their technical knowledge.

Thus, using PD did not mean not changing dysfunctional practices, but, promoting indigenous positive correlates of child growth by using community wisdom through people who promote positive practices (here grandmothers) in concert with technical interventions.

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REFERENCES

1. Wishik SM, Vynck SVD. The use of nutritional 'positive deviants' to identify approaches for modification of dietary practices. *Am J Public Health* 1976; 66 : 38-42.
2. Mustaphi P, Dobe M. Positive deviance- the West Bengal experience. *Indian J Public Health* 2005; 49(4) : 207-213.
3. National Family Health Survey-Uttar Pradesh. *Background Characteristics of Households* (Chapter 2) International Institute of Population Sciences, Mumbai, 1998-99; 15-36.
4. Waterlow JC, Buzina R, Keller W, Lane JM, Nichaman MZ, Tanner JM. The presentation and use of height and weight data for comparing the nutritional status of groups of children under the age of 10 years. *Bull World Health Organ* 1977; 55: 489- 498.
5. Caldwell B, Bradley R. *Home Observation for Measurement of the Environment*. Little Rock, Ark, USA: Lihle Rock Ark, University of Arkansas Press, 1984.