

Mortality Among the Syrian Christians

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ABSTRACT It is presently attempted to understand the causalities of mortality among the Syrian Christians of Kerala at the various phases of life namely, pre-natal and post-natal. Pre-natal mortality was found to be of the order of 4.76%. Infant mortality has become an infrequent event in this population and thus, indicating that this population's health stands at a high level.

INTRODUCTION

Mortality is an important bio-cultural episode and it is closely associated with health status of a population.

Most pre-natal mortalities (abortions, miscarriages, foetal deaths and still births) are reported to occur during the first trimester and are attributed to serious genetic abnormalities in the foetus. The incidence of genetic abnormalities appears to be closely associated with maternal age (Menken et al., 1981; Srivastava and Saxena, 1981; Pebley et al., 1985). Both Higher order pregnancies and those conceived at older ages are more likely to terminate in loss (Casterline, 1989). But Sundari (1993) reported that women pregnant for the first time and in their twenties suffered higher pregnancy loss than other age and parity groups and it was attributed to mother's poor nutritional status.

Out of the four phases of mortality conceivable in the post-natal (infant, child, juvenile and adult), infant mortality is considered to be one of the major contributors to death in population having high mortality and therefore, infant mortality rate has been recognized as an excellent summary index of the level of socio-economic development of population of country (Jain and Visaria, 1988). In India, especially the rural areas show a high infant mortality. This would reduce eventually in the course of time with medic care, improvement in women's education and better economic conditions (Jain, 1985).

These factors over a period of time, led to the decline of infant and child mortality which seems to have resulted in the fall of birth rates in Kerala (Nair, 1974; Panikar, 1979; Nag, 1984). Along with these several of the developmental programme factors such as land reforms, universal literacy programme (MCH), family planning programme, etc., have played decisive roles in the Kerala's demographic transition (Zachariah, 1999).

The Syrian Christians of Kerala constitute the most ancient and still the dominant Christian community of India. Like the rest of Kerala. Syrian Christians also show a reduced fertility and mortality.

The community in general show a high age at marriage, very high literacy rate, positive attitude towards family planning and acceptance of the small norm by the people. It is presently attempted to understand the causalities of mortality at the pre-natal and post-natal stage, in this population.

MATERIAL AND METHOD

Pre-natal and post-natal mortalities reported among the mothers ranging from 20-83 years were taken into consideration. The sample was taken from randomly selected three villages. The questionnaire consisting of both structured and open-ended questions was used to collect the necessary information.

RESULTS AND DISCUSSION

Pre-Natal Mortality

In the presently studied population out of 1533 (recorded) materialized total conceptions. 1.37% resulted in abortions - 0.26% being induced and the rest 1.11% being spontaneous. Low frequency of induced abortions is expected because most of the Syrian Christian women

(90%) were found to have strong disliking for induced abortions.

Mothers age-cohort-wise distribution of experience of pre-natal mortality has been set out in table 1. When the ratio between mothers experiencing one pregnancy wastage and two pregnancy wastage was calculated for the first trimester (spontaneous and miscarriages), it was found to be 5.61. When a similar ratio for the second and third trimester (foetal deaths and still births) was calculated, it was found to be much higher (=9.6), clearly indicating that there is a greater recurrence of abortions and miscarriages than that of foetal deaths and still births. This may be quite expected particularly in view of the enhanced role of serious genetic abnormalities in the first trimester as generally reported. However for the present population the genetic causality of pre-natal mortality could not be ascertained because of lack of information (as rendered by the informants).

The total pre-natal loss of conceptions (minus induced abortions) in this population is found

to be of the order of 4.76%.

When the data on pre-natal mortality was further analyzed with respect to pregnancy order (Table 2), it was observed that, the lowest and the highest pregnancy orders namely pregnancy order I and IX respectively were subjected to greater risk of pre-natal loss than the other pregnancy orders. The pregnancy order II appeared to be the safest in this population with respect to prenatal loss. However, pregnancy orders between III and VII are subjected to quite similar pre-natal loss (5-6%), despite the average age of the mother at these pregnancy orders rising from about 29 years at pregnancy III to about 38 years at pregnancy order VIII.

Post-natal Mortality

Infant mortality

During the years of study no infant mortality was found. Though this may be a chance occurrence in the sample but the result cannot totally ignored because the last reported case of

Table 1: Age-Cohort-Wise distribution of mothers who had ever experienced pre-natal mortality

Age-cohort	No. of spont. abortions		No. of miscarriages		No. of foetal deaths		No. of still births		Mother who had exp. pre-natal mortality		Total No. of mothers
	1	2	1	2	1	2	1	2	No.	%	
20-24	-	-	1	-	-	-	-	-	1	9.09	11
25-29	1	-	1	-	-	-	1	-	3	7.50	40
30-34	3	-	2	-	3	-	-	-	8	13.33	60
35-39	1	2	3	-	1	2	1	-	10	14.08	71
40-44	-	1	1	1	-	-	2	-	5	11.36	44
45-49	1	-	2	-	1	-	1	-	5	13.16	38
50+	5	-	7	1	3	-	16	1	33	18.64	177
Tot. no. Mothers	11	3	17	2	8	2	21	1	65	14.74	441
%	2.49	0.68	3.85	0.45	1.81	0.45	4.76	0.23			
Tot. No. Prgncy. Wstge.	17 (1.11%)		21 (1.37%)		12 (0.78%)		23 (1.50%)				

Table 2: Distribution of pre-natal mortality by pregnancy order

Pre-natal mortality	Pregnancy Order								
	I	II	III	IV	V	VI	VII	VIII	IX
(a) Number	28	12	16	9	6	-	-	1	1
(b) Percentage	6.35	3.06	5.69	5.26	5.61	-	-	5.26	9.09
Total No. of pregnancies	441	392	281	171	107	-	-	19	11
Average age of mother (in years)	21.99	25.43	28.55	31.14	32.92	-	-	37.67	40.87

mothers who were in the 50+ age group. It also reveals high average fertility ($=5.2927$) among the mothers who had experienced infant mortality compared to the mothers who did not experience it. This trend was observed in all age groups excepting age group 45-49 years. Mothers in the 20-24 years age group had experienced no infant mortality which further supports the earlier observation that infant mortality has become an infrequent event in this population.

Causalities of Mortality at the Post-natal Stage

Ninety six (6.6% of the total live births) deaths were reported in the post-natal stage. The total offspring mortality reported in the study and its causalities are set out in table 5. Deaths due to unknown cause or ill-defined deaths formed the major bulk (33.33%) of the total deaths reported and they belonged mainly to neonatal stage. 'Fever' was the second major killer and it predominated in the child as well as in the juvenile stage. This was followed by 'accidents' which predominated at the age of 15 years and above (one accidental case was of suicide).

<i>Infant mortality</i>	<i>Pregnancy Order</i>							<i>Total</i>
	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>V</i>	<i>VI</i>	<i>VII</i>	
Male (No.)	9	2	6	2	1	-	1	21
Female (No.)	13	1	-	1	1	1	3	20
Total No.	22	3	6	3	2	1	4	41
Percentage	53.66	7.32	14.6	7.32	4.88	2.44	9.76	100.00

CONCLUSION

Pre-natal mortality was found to be of the order of 4.76% among the Syrian Christians. This brings in the urgency to concentrate more on mother-child health care programmes especially for prospective Syrian Christian mothers

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Table 5: Causes of death among the offsprings

Cause of death	Peri-natal	Neo-natal	Infant	Child	Juvenile	15 yrs. +	Total	
	(Few Hrs.)	(< 1 month)	(< 1 Yr.)	(1-4 Yrs.)	(5-14 Yrs)		No.	%
Unknown	3	20	4	4	1	-	32	33.33
Fever	-	-	4	6	6	1	17	17.71
Accidents	-	-	1	1	4	7	13	13.54
Infectious Dis.	-	-	3	6	-	-	9	9.37
C N S Disorder	-	-	-	-	2	3	5	5.21
Diarrhoea	-	-	2	3	-	-	5	5.21
Asthma	-	-	-	-	1	2	3	3.13
Blood Cancer	-	-	-	-	2	1	3	3.13
Circulatory Sys. Disorder	-	-	1	-	1	1	3	3.13
Fits	-	2	-	-	-	-	2	2.08
Tetanus	-	1	-	-	1	-	2	2.08
Child Birth	-	-	-	-	-	1	1	1.04
Typhoid	-	-	-	-	-	1	1	1.04
Total	3	23	15	20	18	17	96	100.00
%	3.12	23.96	15.63	20.83	18.75	17.71		

so that it may reduce complications arising during pregnancy especially pregnancy wastage. Infant mortality has become an infrequent event in this population. Availability of medical facilities, maximum utilization of the medical facilities by the people, availability of good road network and transport facilities, and presence of a hygienic environment has all contributed to a good health status among the literate Syrian Christian population.

REFERENCES

- Casterline, J.B.: Maternal age, gravidity and pregnancy spacing effects on spontaneous foetal mortality. *Social Biology*, 36(3-4): 186-212 (1989).
- Jain, A.K.: Determinants of regional variations in infant mortality in rural India. *Population Studies*, 39(3): 407-424 (1985).
- Jain, A.K. and Visaria, P.: *Infant mortality in India: Differentials and determinants*. Sage Publications, New Delhi (1988).
- Menken, J.A., Trussell, T.J. and Watkins, S.: The nutrition-fertility link: An evaluation of the evidence. *Journal of Interdisciplinary History*, 11: 425-441 (1981).
- Nair, P.R.G.: Decline in birth rate in Kerala. *Economic and Political Weekly*, 9: 323-326 (1974).
- Nag, M.: Impact of Social and economic development on mortality: Comparative study of Kerala and West Bengal. *Economic and Political Weekly*, 18(19-21): 877-899 (1983).
- Nag, M.: Fertility differentials in Kerala and West Bengal: Equity-fertility hypothesis an explanation. *Economic and Political Weekly*, 19: 33-41 (1984).
- Panikar, P.G.K.: Resources not the constraint on health improvement. *Economic and Political Weekly*, 14: 1803-1809 (1979).
- Pebbley, A.R., Huffman, S.L., Chowdhury, A.K., Aladdin M. and Stupp, P.W.: Intra-uterine mortality and maternal nutritional status in Rural Bangladesh. *Population Studies*, 39: 425-440 (1985).
- Srivastava, J.N. and Saxena, D.N.: Infant mortality differentials in an Indian setting: follow up of Hospital deliveries. *Journal of Bio-social Science*, 13(4): 467 (1981).
- Sundari, T.K.: Can health education improve pregnancy outcome: Report of a grassroots action education campaign. *The Journal of Family Welfare*, 39(1): 1-12 (1993).
- Zachariah, K.C.: Models of Development and demographic change: A case study of Kerala. *Demographic India*, 27(1): 71-89 (1999).