

BELIEFS AND PRACTICES OF BIRTH ATTENDANTS DURING ANTENATAL PERIOD IN A RURAL AREA

by

VIJAY KUMAR*

and

INDERJIT WALIA,**

Abstract

Beliefs and practices of 81 birth attendants (39 trained and 42 untrained) regarding antenatal care have been studied by using a pretested interview schedule. The need for regular antenatal check up was recognised by 88% of trained and 64% of untrained birth attendants. The importance of tetanus toxoid administration was understood by 90% of trained and only 54% of untrained birth attendants. Referral for 5 common complications of pregnancy was not considered necessary by 10-36% of trained and 21-47% of the untrained birth attendants ($p = < 0.05$). The beliefs and attitudes of trained birth attendants are in agreement with modern scientific thinking which makes a strong case for training of birth attendants in improving the quality of antenatal care and in reducing morbidity and mortality.

Introduction

In developing countries, limited resources and shortage of trained personnel precludes hospital confinement for all women. Ninety per cent of deliveries in

India (Gordon, 1964), 80-90% in Indonesia, 75% in Thailand and 50% in Malaysia are conducted at home by birth attendants which is in sharp contrast to the situation in the developed countries where most deliveries are conducted in the hospitals in the presence of trained personnel (Maria and Lily, 1972). The lack of regular antenatal care and unavailability of trained birth attendants during the time of confinement are important factors responsible for the high maternal and perinatal mortality in most developing countries. Even though the traditional birth attendants (TBA's)† may lack knowledge and skills from scientific point of view, they are acceptable to the community because they are easily available, perform tasks which are not considered 'dignified', speak the local language, have cultural identity and are less expensive than trained personnel (Chen, 1977).

For a long time, the developing countries will continue to depend on the services of TBA's in providing care during pregnancy, confinement, post partum and neonatal periods. One of the logical approaches used to improve the quality of

*Associate Prof. and Head.

**Lecturer.

Department of Community Medicine, Post-graduate Institute of Medical Education and Research, Chandigarh-160 012.

Accepted for publication on 28-7-81.

†Traditional birth attendants — A person (usually a woman) who assists the mother at child birth and who initially acquired her skills delivering babies by herself or by working with other traditional birth attendants — (Maria 1972).

care during these periods would be to train the TBA's so that they can perform the expected tasks while still retaining the positive attributes which make them acceptable to the community.

Government of India, first initiated training programme for birth attendants in 1952. This was not availed of by a large number of TBA's (Dutt, 1962). In 1977, a programme of short term training for TBA's was organised in an attempt to train 0.6 million TBA's for as many villages in the country. One of the prerequisites for the planning of a successful training programme is to identify the existing beliefs and attitudes which may have a bearing on the outcome of pregnancy (Jesudason, 1979).

The present study was undertaken in one community development block of Haryana State, India to identify the existing beliefs and attitudes of trained and untrained birth attendants regarding care during pregnancy.

Methods

A backward community development block of Haryana state in North India, with total population of 112,000 living in 158 villages was chosen for the study. People are poor with small land holdings, literacy is low and 23% belong to schedule caste (under privileged). Housing is inadequate with mud walls, thatched roofs, poor ventilation and insufficient lighting.

Deliveries are conducted by the birth attendants at home. Less than 10% of the women deliver in the hospital or a health center. Facilities for regular antenatal care are available in 20 of 158 villages but women from outside these villages do not utilise these facilities and depend upon TBA's to provide antenatal care.

Thirty-eight villages were randomly

chosen for the study so as to be representative of the 158 villages in the block. Birth attendants were identified by contacting informal village leaders, women in the village and government health functionaries responsible for providing health coverage to the village. All the 81 practicing birth attendants were studied (birth attendant population ratio = 1:522). The birth attendants who were selected for the study were active. They were conducting 10-50 deliveries per year.

An interview schedule comprising of open ended questions was prepared and pretested. The schedule comprised of questions concerning antenatal care and management of complications during pregnancy. The questions were framed, keeping the learning objectives of the training programme for TBA's in mind. The questionnaire was pretested. The interview schedules used during pretesting were not included in the final analysis. The interviews were conducted at home in a friendly and familiar set up. The questions were non-judgemental and non-threatening. The interviews were conducted in vernacular using the local dialect. On an average, each interview lasted 45 minutes. The interest of birth attendants was sustained throughout the interview.

Observations

There were 42 trained and 39 untrained birth attendants. The trained birth attendants comprised of higher number of younger women ($p = < 0.05$) who were educated and from upper castes when compared to the untrained group (Table I).

Forty-four per cent of untrained and 19% of trained birth attendants believed that the ideal time for marriage of girls

TABLE I
Characteristics of Birth Attendants

	Trained birth attendants (n = 42)		Untrained birth attendants (n = 39)	
	No.	Percentage	No.	Percentage
<i>Caste</i>				
High	21	(50)	7	(18)
Low	21	(50)	32	(82)
<i>Education</i>				
Nil	26	(62)	38	(97)
5	13	(31)	1	(3)
5.8	3	(7)	0	—
<i>Age</i>				
< 50 years	34	(81)	23	(59)
> 50 years	8	(19)	16	(41)

was below 16 years of age. According to 40% of untrained and 24% trained birth attendants, women should conceive within 2 years of marriage, otherwise she is likely to be sterile. One third of the birth attendants believed that pregnancy should not be disclosed to others, including the health workers because of the fear that some one might cast an evil eye on the expectant mother which may lead to a miscarriage. Ninety one per cent of trained and 54% of untrained birth attendants thought that pregnancy could safely be declared by the end of the second

trimester. The need for better quality and increased quantity of food was not recognised by a majority of birth attendants. A total of 54% feared that improved nutrition of the pregnant women was likely to result in larger babies thereby often increasing the duration of labour and complications (Table II).

All the birth attendants depended on month of last menstrual period for calculation of expected date of delivery. If this was not remembered by the mother, 80% of the trained and 64% of untrained birth attendants were confident of predicting

TABLE II
Advice Given by Birth Attendants

Advice	Trained birth attendants (n = 42)		Untrained birth attendants (n = 39)	
	No.	Percentage	No.	Percentage
<i>Ideal age of marriage for girls</i>				
Below 16 years	8	(19)	17	(44)
Above 16 years	34	(81)	22	(56)
<i>Contact health personnel during pregnancy</i>				
Before second semester	38	(91)	21	(54)
After second semester	4	(9)	18	(46)
<i>Diet during pregnancy</i>				
Increased food intake	16	(38)	13	(33)
Normal or less food	26	(62)	26	(67)

the date of delivery by palpation of the abdomen (by assessing height of the uterus).

More than 50% of the birth attendants thought that they could accurately predict the sex of the baby. It was believed that if the mother was cheerful, had good appetite (specially for sweet foods), looked healthy, if conception occurs during full-moon period or if the foetus occupies predominantly the right side in the abdomen, the baby would be a male. On the other hand, if the mother was emaciated, had pigmentation on the face, was constantly afflicted with problems like vomiting, aches and pains throughout pregnancy and if foetus occupied left side of the abdomen predominantly, the likelihood of birth of female child was very strong.

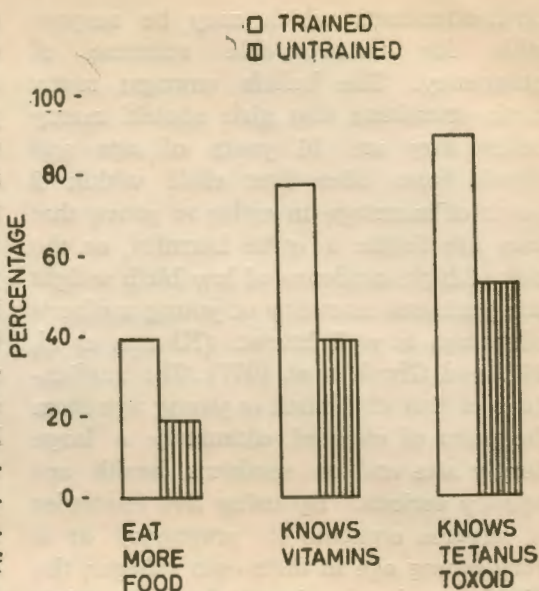


Fig. 1

The need for regular antenatal care was recognised by 88% trained and only 64% untrained birth attendants. Most of the birth attendants who recommended antenatal care were not familiar with the importance of urine examination, B.P. measurement, and palpation of abdomen. The importance of administering tetanus toxoid during pregnancy was understood by 90% trained but only 54% untrained birth attendants (Fig. 1).

When asked about 5 common complications of pregnancy (oedema, bleeding, convulsions, early rupture of membranes and stoppage of foetal movement), 10-36% of the trained and 21-47% of untrained birth attendants did not recommend referral of the mother to the hospital. They relied on measures like massage of the abdomen or home remedies. Many regarded them as self limited problems of minor or no consequence (Fig. 2).

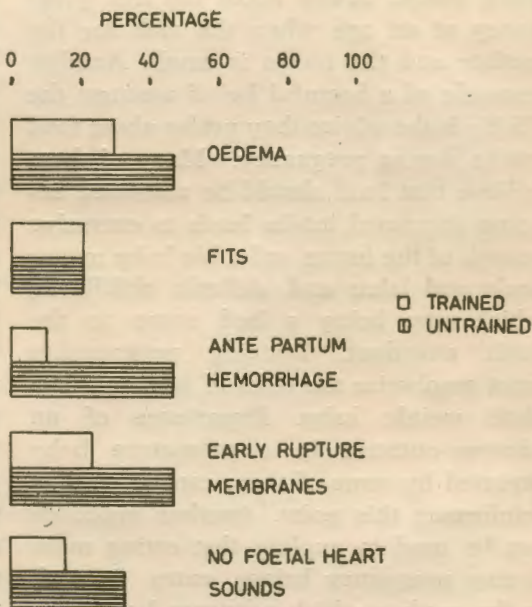


Fig. 2

Discussion

The present study highlights a number of harmful beliefs amongst the traditional

birth attendants which may be responsible for unfavourable outcome of pregnancy. The beliefs amongst many birth attendants that girls should marry before they are 16 years of age and should have their first child within 2 years of marriage in order to prove that they are fertile is quite harmful, as the risk of high incidence of low birth weight and perinatal mortality of young mother's offsprings is well known (Khatua *et al*, 1979 and Ghosh *et al*, 1977). The implications of first childbirth at young age from the point of view of ultimately a large family size and on mother's health are equally serious. By using live examples of adverse outcome in pregnancy at a very young age in their own villages, the TBA's can be convinced about the minimum age for marriage to be 18 years. They should advise about the first pregnancy at an age when the risk for the mother and the foetus is small. Another example of a harmful belief amongst the TBA's is the advice they prefer about food intake during pregnancy. Many of them believe that food should be restricted because increased intake leads to excessive growth of the foetus and a big baby means prolonged labor and difficult childbirth, which may bring a bad name to the birth attendant. Training programmes must emphasise the risks of having a low birth weight baby. Experience of an adverse outcome in a premature baby reported by some of them can be used in reinforcing this point. Another approach can be used to explain that eating more during pregnancy brings extra strength to the mother which prepares her better to tolerate labor pains. It is important to emphasise that some inconvenience during labor is much better than the inconvenience and the risk of bringing up a low birth weight baby. Learning objectives of training programmes for birth

attendants should be framed on the basis of this knowledge. Training programmes aimed at changing these beliefs and imparting necessary skills are likely to reduce the high maternal mortality, perinatal mortality and complications of pregnancy.

The confidence with which the TBA's predict sex of the unborn child is likely to increase her acceptance in the community because she is a source of encouragement to the family if she predicts the sex of the unborn to be the same as desired. If the sex of the baby does not turn out to be the same as predicted, it can be a great disappointment to the mother and lead to unnecessary emotional trauma. If the sex predicted is not what the family desires, they sometimes resort to expensive rituals and treatments in an attempt to change the sex of the baby. Usually the help of an indigenous practitioner is sought who often prescribes herbs and tablets. These may harm the mother and her unborn child.

The beliefs and attitudes of trained birth attendants were in agreement with modern scientific thinking in a larger percentage than those of untrained birth attendants (Table II, Fig. 1). These differences make a strong case for training of birth attendants. Besides the advantage resulting from training, the other positive attributes of trained birth attendants were (a) their educational background, (b) young age and (c) higher caste. These factors may have contributed to their being more receptive to new ideas and rational thinking. While devising training programmes, illiteracy, old age and the background of poverty of birth attendants must be kept in mind because these factors if not properly attended to might undermine the ultimate success of training and its impact. The positive attributes of TBA's which are responsible for their

social acceptance as a birth attendant must also be appreciated by the trainers. These must be preserved so that the birth attendants continue to perform their traditional functions and effectively combine these with modern scientific practices. Chen (1977) has identified 14 such traditional tasks performed by the TBA's.

The harmful beliefs and attitudes of birth attendants in the present study will help in devising a suitable training programme for them. However, they have maximum applicability in the region where the study is conducted as the practices are likely to vary in different countries and in different regions of the same country depending upon the prevalent local customs. For designing relevant learning objectives and successful training programme it would be important to determine the local beliefs and practices as has been recommended by an expert group of WHO.

It is important to train TBA's to remove harmful beliefs and practices responsible for high morbidity and mortality in developing countries (W.H.O. 1979). Important learning objectives for the training of TBA's include (a) early diagnosis of pregnancy (b) provision of antenatal care through regular check up, nutrition advice, tetanus toxoid administration and advice regarding prevention of anemia

by encouraging regular intake of vitamins and iron and (c) identification and referral of high risk group including those women who have developed complications of pregnancy. Training of TBA's is a challenging job because the women in active practice are illiterate, old and under-privileged.

References

1. Chen, P. C. Y.: *Trop. Geog. Med.* 22: 97, 1977.
2. Dutt, P. R.: *Rural health services in India; primary health center; C.H.E.B., Govt. of India, New Delhi 1962.*
3. Gordon, J. E., Helen, G. and John, B. W.: *Am. J. Med. Sci.*, 344: 1964.
4. Ghosh, S., Hooja, V., Mittal, S. K. and Verma, R. K.: *Ind. Ped.* 14: 107, 1977.
5. Govt. of India: *Census of Haryana—District Ambala; Haryana: 1971.*
6. Jesudason, V.: *Midwifery practices of village Dais in Mahbubnagar Taluk; Arch. Child. Health.* 19: 115, 1979.
7. Khatua, S. P., Menocha, B. K, Chatterjee, S. and Balodhi, P. K. R.: *Ind. Ped.* 13: 395, 1979.
8. Maria, D. L. V. and Lily, M. T.: *The traditional birth attendant in maternal and child health and family planning—A guide to her training and utilisation: W.H.O. Offset Publication: 18: 90-92, 1972.*
9. Ministry of Health and Family Welfare: *Towards a new health policy; 1977.*
10. W.H.O.: *Traditional birth attendants; W.H.O. Offset Publication No. 44, 1979.*