

## A STUDY OF OBSTETRIC KNOWLEDGE AND PRACTICES OF VILLAGE DAIS

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### SUMMARY

A study of obstetric knowledge and practice of village dais (TBA) was carried out in Dept. of OBGY, SRTR Medical College Ambajogai and in some villages of Tq. Ambajogai. The study comprises a comparison between trained and untrained dais. Part one of this study deals with an interview of 50 dais (16 trained and 34 untrained) obtaining information regarding antenatal, intranatal and postnatal services. Part two deals with the examination of 150 parturients delivered by these trained and untrained.

It is seen that the knowledge and practices of trained dais are in agreement with modern scientific thinking in greater percentage than those of untrained dais.

More number of complications were observed in parturients delivered by untrained dais. IIIrd stage complications formed the majority of complications which was attributed to poor knowledge of management of IIIrd stage.

As 'Dais' still continue to play a major role in rendering MCH services, we suggest to focus the attention on them and serious attempts should be made to train, upgrade and evaluation of them frequently. If possible NGO's may be incorporated with the official health care delivery system for an effective reduction in maternal mortality and morbidity and neonatal mortality and morbidity.

### INTRODUCTION

Traditionally, motherhood is considered to be a divine phenomenon in our country. Traditional practices along with various cultural values relating to motherhood are

deep rooted in the ancient Indian culture.

TBAs deliver about two-thirds of the babies in the world. They are found in almost every village in Asia. It is estimated that there are over 600,000 dais in India, who attend 80% of all births, inspite of the facts that ANM are being posted for every 10,000 population. However, lack of ante-

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natal care still forms a major cause for increased maternal mortality and morbidity and neonatal mortality as well.

In developing countries like India, the advancing medical technology has created superspecialized hospitals. Although these institutions have antiseptic labour rooms equipped with latest gadgets of modern technology, they are out of reach of majority of mothers who still prefer to be delivered at home by the TBAs.

The aim of the present study is

- a) to study obstetric knowledge and practices of village dais in respect with antepartum, intrapartum, and postpartum care.
- b) to study parturients delivered by village dais

#### MATERIAL AND METHODS

The present study was carried out in SRTR Medical College, Ambajogai, District Beed (Maharashtra) and some adjoining villages of Ambajogai Taluka from June 1991 to Nov. 1992.

This study comprises of two parts. Part one deals with the direct interview of Dais. A total of 50 dais were interviewed, out of which 16 were trained dais and 34 were untrained dais. These dais belonged to MANAVLOK, a nongovernment organisation based at Ambajogai aimed at integrated rural development. The trained dais were trained by the organisation itself with the help of department of OBGY, SRTR Medical College Ambajogai.

Part two deals with the detailed examination of parturients delivered by dais both trained and untrained. A total of 150 parturients were examined, of which 123 were delivered by untrained dais and rest 27 by trained dais. An attempt is also made to compare between the trained and untrained dais.

#### OBSERVATIONS

##### Part One

The work of "DAI" is usually a work of an older woman. In the present study 42% i.e. majority of dais belonged to age group of 46-50 years, while only 16% of dais belonged in age group of 20-35 years.

The educational status of these dais was very poor. Only 10% of dais had education till primary level while 90% of them were illiterate.

Table I shows the knowledge of antenatal care. 68.75% of trained dais had knowledge of antenatal care while it was totally absent in untrained dais. However the essential parameters in antenatal care like weight record, Blood Pressure, urine examination was known to only 25% of trained dais. The role of antenatal care in prevention and control of various ailments was almost unknown.

Table I

#### Knowledge of Antenatal Care

Trained	Untrained
1 (68.75%)	—

Table II

#### Knowledge of well being of foetus

Method	Trained	Untrained
a) by perception of foetal movements	8 (50%)	18 (50%)
b) foetal heart sounds	5 (31.25%)	—
c) No knowledge	3 (18.75)	17 (50%)

Table II shows the knowledge of well being of foetus. 'Perception' or 'Palpation' of foetal movements was the principle method to deduce the knowledge of foetal well being in majority of dais in both groups. But, however 50% of untrained dais and 18.75% of trained dais had no knowledge of foetal well being.

Table III shows the knowledge of high risk pregnancy. It can be said that the knowledge of high risk pregnancy is more in trained dais than in untrained dais. Eclampsia (edema over feet, fits) was the commonest condition known to both groups. The knowledge of high risk pregnancy is still far from satisfactory to be effective.

Table IV shows the position of parturient advised. It was interesting to note that almost all untrained dais and majority of

trained dais advocated and practiced 'Squatting' of 'Sitting' posture for conduct of delivery.

Table V shows the knowledge of aseptic precautions. The knowledge of aseptic precautions in the form of washing hands before conduct of delivery, making the ground dust-free, etc. was known to 87.50% of trained dais as compared to only 5.88% of untrained dais.

Table VI shows the instrument used to cut the umbilical cord. Fortunately it was seen that 68.75% of trained dais and 58.82% of untrained dais used new (boiled) blade to cut the umbilical cord.

Table VII shows the method used to deliver the placenta. Majority of dais from both groups went for spontaneous expulsion of placenta. But a large number of them gave an abdominal massage to deliver the placenta.

Table VIII shows the knowledge of Tetanus immunization. It was seen in 81.25% of trained dais and in 52.95% un-

Table III

## Knowledge of high risk pregnancy

Condition	Trained	Untrained
1) Eclampsia	11 (68.75%)	3 (8.82%)
2) PV bleeding	05 (31.25%)	1 (2.94%)
3) Tr. lie	6 (37.50%)	—
4) Anaemia	7 (37.50%)	—
5) Pre. LSCS	5 (31.25%)	—
6) Twin pregnancy	1 (6.25%)	—

Table IV

## Position of Parturient

Position	Trained	Untrained
1) Dorsal lithotomy	7 (43.75%)	—
2) Squatting/sitting	9 (56.25%)	34 (100%)

Table V

## Knowledge of Aseptic precautions

Trained	Untrained
14 (87.50%)	2 (5.88%)

Table VI

## Instrument used to cut the cord

Instrument	Trained	Untrained
1) New/boiled blade	11 (68.75%)	20 (58.82%)
2) Old/unboiled	—	14 (41.18%)
3) Scissor	5 (31.25%)	—

trained dais.

Table IX shows the knowledge of various complications which is far from sat-

Table VII

Method of delivery of placenta

Method	Trained	Untrained
1) Spontaneous	10 (62.50%)	30 (88.25%)
2) Abdominal message	8 (50%)	12 (35.29%)
3) Cord traction	1 (6.25%)	—

(Total figure of dais exceeds as they may resord to one or more methods)

Table VIII

Knowledge of Tetanus immunization

Trained	Untrained
13 (81.25%)	18 (52.95%)

Table IX

Knowledge of complications

Complication	Trained	Untrained
1) PPH	11 (68.75%)	4 (11.76%)
2) Obstructed labour	8 (50%)	2 (5.88%)
3) Retained Placenta	5 (31.25%)	—
4) Pueperal sepsis	3 (19.75%)	—

(Total no. exceeds as dais may have knowledge of one or more complications)

isfactory. The commnest complication known to both groups was postpartum haemorrhage, followed by obstructed labour but the nature of which was not known.

Table X shows the knowledge of various methods of family planning. 81.25% of trained dais advised OC pills and Cu. T for contraception. But the advice was rarely accepted.

Table X

Knowledge of methods of family planning

Method	Trained	Untrained
1) O. C. Pills	13 (81.25%)	9 (26.48%)
2) Cu. T.	13 (81.25%)	10 (29.41%)
3) Condom	2 (12.5%)	3 (8.92%)

Part Two

The Part Two consists of the study of 150 partureints delivered by trained and untrained dais. 27 were delivered by trained dais while 123 partureints were delivered by untrained dais. Majority of them were multipara (IIIrd para or more) to an extent of 58.68%. But surprisingly 20.66%. Primis preferred home delivery over hospital delivery.

Table XI shows the Parturients who received antenatal care. Out of 27 Partu-

Table XI-A

Parturients receiving Antenatal Care

	Received	Not received
Trained	14 (51.85%)	13 (48.15%)
Untrained	17 (13.82%)	106 (86.18%)

( $X^2 = 19.53$   $P \leq 0.001$ )

rients delivered by trained dais 51.85% received antenatal care and 51.85% of them were immunized against Tetanus.

Table XII shows the position given to the Parturients during delivery. 99.18% of Parturients delivered by untrained dais and 88.88% trained dais delivered in Squatting position.

Table XIII shows the aseptic precautions taken by dais. Aseptic precautions in the form of washing hands and cleaning the floor was taken in 70.37% of deliveries conducted by trained dais as opposed to only 16.26% of deliveries conducted by untrained dais. The  $X^2$  test shows that the difference between the performance of trained and untrained dai is highly significant.

Table XIV shows the instruments used to cut the umbilical cord. Blade was commonest instrument used. But in 50.40% of Parturients old or unboiled blade was used

by untrained dais to cut the umbilical cord.

Table XV shows the occurrence of various complications found in Parturients. The commonest complications was postpartum haemorrhage, to an extent of 28.45% of Parturients delivered by untrained dais and 3.7% by trained dais. Retained Placenta (16.26%) and puerperal sepsis (15.44%) were the next common complications. Third stage complications like PPH, retained placenta, and Uterine inversion (Total 56) formed the major contribution in the list. There were total 2 deaths resulting from puerperal sepsis. Both these patients were delivered by untrained dais and were referred to this hospital.

Table XVI shows various complications in new born. Ophthalmia neonatarum was the commonest complication seen to an

Table XI-B

Immunization status of parturients  
(Tetanus)

Immunized Not Immunised

Trained	14 (51.85%)	13 (48.15%)
Untrained	13 (10.56%)	110 (89.44%)

( $X^2 = 25.51$   $P \leq 0.001$ )

Table XII

Position of Parturients

Position	Trained	Untrained
1) Squatting	24 (88.88%)	122 (99.18%)
2) Dorsal lithotomy	3 (11.12%)	1 (00.82%)

Table XIII

Aseptic precautions taken by dais

	Taken	Not taken
Trained	19 (70.37%)	8 (29.63%)
Untrained	20 (16.26%)	103 (83.74%)

( $X^2 = 33.69$   $P \leq 0.001$ )

Table XIV

Instruments used to cut the cord

Instrument	Trained	Untrained
1) New/boiled blade	20 (74.07%)	60 (48.78%)
2) Old/unboiled blade	2 (7.4%)	62 (50.40%)
3) Scissor	5 (18.53%)	—
4) Sickle	—	1 (0.82%)

extent of 2.43% of babies followed by Tetanus neonatarum in 1.62%. All these complications were seen in babies delivered by untrained dais. There were 7 fresh stillbirths causes of which could not be elicited.

Table XVII shows motivations of sterilization. A total of 50 Parturients were referred to this hospital for sterilization. It is seen that the amount of motivation in number of percentage delivered by both trained and untrained dais was equal. Unfortunately it is observed that motivation is poor with less parity.

### DISCUSSION

The present study which was carried out in SRTR Medical College, Ambajogai and in some villages falls in "Marathwada

region" of Maharashtra which is considered to be a backward and underdeveloped sector of the state.

The dais studied in the present study came from low socio-economic class and as the process of delivery is considered to be "unclean" most of them belonged to backward classes. The educational status of them

Table XVI

#### Complications in New born

Complication	Trained	Untrained
1) Fresh still birth	—	7 (5.69%)
2) Ophthalmia Neonatarum	—	3 (2.43%)
3) Tatanus Neonatarum	—	2 (1.62%)
4) Congenital anamoly	—	2 (1.62%)
5) Neonatal Jaundice	—	1 (0.81%)
6) Arrest of after coming head	—	1 (0.81%)
<b>Total</b>		<b>16 (12.98%)</b>

Table XV

#### Occurence of Complications

Complications	Trained	Untrained
1) PPH	1 (3.7%)	35 (28.45%)
2) Retained Placenta	—	20 (16.26%)
3) Pueperal sepsis	2 (7.4%)	19 (15.44%)
4) 2nd Degree tear	1 (3.7%)	10 (8.13%)
5) PPE	—	5 (4.06%)
6) UTI	—	2 (1.62%)
7) Paraurethral tear	—	1 (0.81%)
8) 3rd Degree tear	—	1 (0.8%)
9) Inversion	—	1 (0.81%)
<b>Total</b>	<b>4 (14.81%)</b>	<b>94(67)(54.47%)</b>

(27 Parturients delivered by untrained dais had more than one complication. The total No. of Parturients having complications in untrained group is 67 and om traomed os 4)

Table XVII

#### Motivation for sterilization

Parity	Trained	Untrained
II	Nil	3
III	6	13
IV	1	19
V	2	2
VI	Nil	4
	<b>9(33.33%)</b>	<b>41 (33.33%)</b>

was negligible. The work of dai is looked upon as a source of income in many families.

As the 'Pregnancy' is considered by an average Indian woman, a condition for which no medical supervision is needed, the work of 'dai' is mainly confined only during labour. The knowledge of antenatal care was present in 68.75% of trained dais, while it was totally absent in untrained dais in the present study. 51.85% of parturients delivered by the trained dais received antenatal care as opposed to only 13.82% by the untrained dais in this study. Lack of antenatal care still forms one of the major cause for increased maternal mortality and morbidity and also for perinatal mortality and morbidity in the rural area. Mathur (1983) and Rao (1975) had reported similar findings in their study.

The knowledge regarding high risk pregnancy is far from satisfactory. Eclampsia, as it is still very common in rural areas was known to majority of dais in the present study. But the co-relation of blood pressure, oedema over feet and eclampsia was not known to any of the dais. As early detection of high risk pregnancy and early referral remains mainstay to decrease the maternal mortality and morbidity, there is an increased necessity to upgrade the knowledge of dais regarding antenatal care and high risk pregnancy.

Knowledge of asepsis was very poor, only to an extent of 5.88% in untrained dais and in only 16.26% of parturients aseptic precautions were taken. But however the knowledge is better in trained dais. Similar findings were noted by Sharma (1990) & by Suraja Prabhu & Gopa Kothari (1986) New boiled blade was the commonest instrument used to cut the cord, but however a large number of untrained dais (41.18%) use unboiled and old blade to cut the cord. In the present study 15.44% of parturients delivered by untrained dais and 7.4% by trained dais developed puerperal sepsis. The increased incidence of puerperal sepsis can be attributed to the poor

knowledge of dais regarding asepsis.

Mismanagement of IIIrd stage of labour is another major concern. Giving abdominal massage, pressure over the abdomen around umbilicus, is practiced almost universally in this area. Hot bevarages like tea, coffee, ash mixed with water, hair is also given orally as a part of management as they induced vomiting and thereby helped the placenta to delivery earlier. IIIrd stage complications namely PPH, retained placenta and inversion of uterus formed the majority of complications occuring in this area (45.52%). This increased incidence is related with the improper management and ignorance of IIIrd stage management.

In the present study it is seen that the total number of complications were more in parturients delivered by untrained dais. Out of 150 parturients studied 67 parturients (54.47%) delivered by untrained dais has one or more complications and only 4 (14.81%) parturients delivered by trained dais had one or more complications. There were two deaths resulting from puerperal sepsis, both of them were delivered by untrained dais.

Neonatal care was almost unknown to all dais. There were 7 fresh stillbirths, while 3 babies suffered form ophthalmia neonatarum and 2 tetanus neonatarum. Though the causes of which could not be elicited exactly, the knowledge of resucitative measures of asepsis could have prevented the calamity.

Knowledge of various methods of family planning in dais is disappointing. Though most of the trained dais knew the methods, they failed to motivate the parturients. The wish of having a 'male' child for various social and religious reasons was the commonest factor making them resistant for sterilization.

Like in many developing countries, in rural India TBAs take care of most of the parturients. The TBA is a direct link to women of reproductive age who might otherwise not be reached by the usual clinic and

health delivery services. In the present circumstances of limited budget, Non government organisations like 'Manavlok' should be amply supported by the present official health system and if possible services should be incorporated to decrease the morbidity and mortality and thereby improving MCH services.

CONCLUSIONS

- 1) Overall it can be concluded that the knowledge and practices of trained dais are in agreement with modern scientific thinking in a greater percentage than those of untrained traditional birth attendants.
- 2) As dais may play a pivotal role in reduction of maternal morbidity and mortality at Primary health care level, due to attention should be focussed on them.

Training, evaluation and upgradation in their knowledge with special emphasis on identification of high risk pregnancy and management of third stage should be brought about.

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