UTILIZATION OF TRADITIONAL BIRTH ATTENDANTS IN MCH CARE IN RURAL MALAYSIA

H Yadav

Institute Kesihatan Umun
Jalan Bangsar
Kuala Lumpur
Malaysia

H Yadav, MBSS, MPH, MBA

SYNOPSIS

The traditional birth attendant *(bidan kampong)* or the TBA is still responsible for a substantial number of deliveries in Peninsular Malaysia. In the study area, the TBA s were responsible for about 47.2% of the deliveries in 1976. They were also responsible for a substantial number of maternal deaths in the district. Therefore it was decided to identify and train the TBA s to identify 'at risk' cases of mothers and children and refer them to the nearest health facility. The TBA s were trained to use simple hygenic and aseptic procedures. At the end of their training all of them were presented with a UNICEF midwifery kit. The short training proved useful because they now deliver fewer 'at risk' cases and there is an increasing trend among them to refer the 'at risk' cases to the hospitals. The utilizations of TBA s in the maternal and child health program is a useful tool for the attainment of primary health care objective for developing countries by the year 2000.

INTRODUCTION

In Peninsular Malaysia it has been estimated that there are 3,000 registered traditional birth attendants. It has been estimated that 50%-80% of all domiciliary deliveries in developing countries in South East Asia are attended by TBAs (1) yet many countries have yet to realise the important role the TBAs play in maternal and child health care. In the declaration of Alma Ata for the attainment of 'Health Care for all by the year 2,000', all possible resources in the community have to be identified and utilised if we are to achieve this aim. In Malaysia the traditional birth attendant had been utilised for family planning activities. (2) Similarly many other countries have utilised the traditional birth attendant for maternal and child health program and now other countries are looking into his 'untapped resource' to achieve its aim of primary care for all by the year 2000.

This paper deals with the training, utilization and evaluation of traditional birth attendants *(bidan kampung)* for maternal and child health care and the benefits and advantages which have been derived from such a program.

BACKGROUND

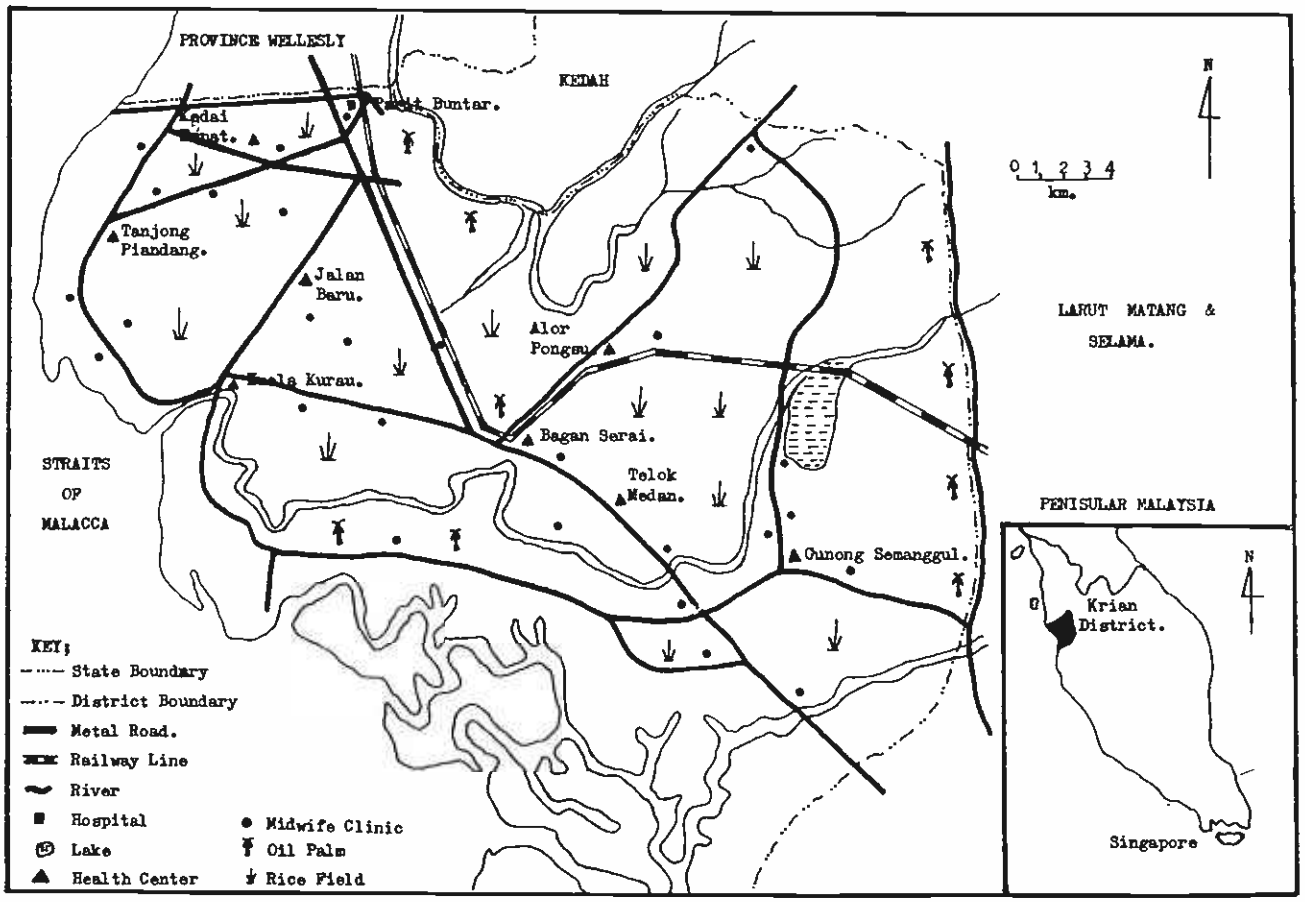
The district of Kerian conducted a survey of infant, maternal and toddler mortality as part of the high risk approach project in maternal and child health care. In this study (unpublished) it was found that the TBAs were responsible for 47.2% of the deliveries in the district in 1976, and they were also responsible for 58% of maternal deaths in the district. (3) Since the TBA were responsible for a substantial amount of maternal and child health care, the need to utilise the TBA was realised. Like many other countries the TBA are accepted by the people and they also perform more duties than the government midwife. Chen (1977) (4) also noticed that the *bidan kampong* performed fourteen traditional duties whereas the government midwife performed only three of those duties.

Other reasons why the TBAs were more popular than the government midwives were that the TBAs were easily available, the TBA were more influential and that they stayed within the vicinity of the village unlike the government midwives who sometimes may be a few kilometers away and sometimes may not be available when called. It is also known that the rural Malays have several customs related to child birth in Malaysia (5) and the TBAs were well versed with these customs as compared to the government midwives.

Realising the significant role played by the TBAs in the maternal and child health program it is important that this 'untapped resource' be utilised, and with this in mind a training program was planned for the TBAs.

STUDY AREA

The study was carried out in the district of Kerian (Fig. 1). Kerian district is situated in the north west part of Peninsular Malaysia, approximately 320 km from Kuala Lumpur. The district is bounded by the Province Wellesley and Kedah state to the north, the Larut Matang and Selama district of Perak to the East and South and Straits of Malacca to the West. The district has an area of 857 sq kilometers and population of 157,649 (density 184 per sq km). The population is mainly rural and ethnic Malays constitute 65.2% of the total population. The Chinese who are mainly more urbanised constitute 22.4% of the total population and Indians constitute 12.3% of the population. The main source of income is rice growing, rubber and palm oil planting. In the coastal area fishing is the main form of livelihood.



ORGANIZATION OF MATERNAL AND CHILD HEALTH CARE IN THE DISTRICT

Maternal and child health care is provided both by the government and the private sector, Chen (6) describes the rural health system in Malaysia in detail. Briefly the maternal and child health care in the district is provided by:

- Hospital, Health Centers and midwife clinics (Government sector)
- General Practitioners (Private Sector)
- Estate Hospitals (Private Sector)
- Traditional Birth Attendants (TBAs)

The 141 bedded district hospital has 5 physicians and it also has a maternity and a paediatric ward. The 'high risk' children are identified at the health center or the midwife level and then referred to the nearest hospital for further management. The distance from the health center to hospital can range from 8-15 km. Sometimes the cases may be referred to a larger hospital (20 km) where specialists are availabel for better treatment of the cases.

Fig. 2 shows that the health center covers a target population of 10,000. There are two categories of health centers, the main health centers and the health subcenters. A doctor is available in the main health center and he makes visits to the other health subcenters in the district weekly. The public health nurses from all the health centers visit the midwife clinics for conducting maternity clinics and child health clinics. The midwife clinic is the smallest health unit in the rural area.

Each midwife clinic (28 in number in the district) covers a population of 2,000. A single midwife main tains the clinic and quarters. Her main role is to organize antenatal, postnatal and conducting deliveries in the home. She may have 3 or 4 TBAs competing with her for the deliveries in the district. The pubic health nurse from the nearest health center visits the midwife clinics and conducts child health sessions and immunization for the children in her operational area. She also supervises the midwife's work.

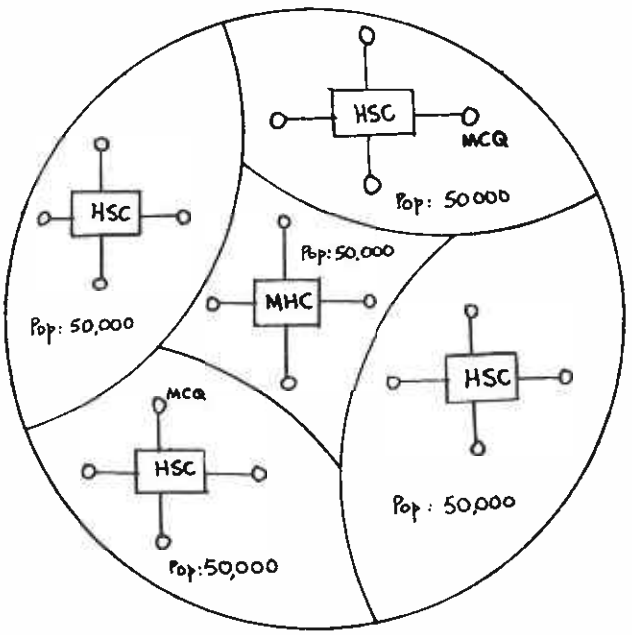
General Practitioners are physicians in the private sector. They play an important role in maternal and child health care because they treat and provide antenatal and postnatal care for mothers and children. Some of the general practitioners own maternity homes where some mothers have their deliveries.

The estate hospitals are small hospitals which are run by the large rubber estates in the district. There are three such hospitals and they have a midwife who is responsible for the welfare of the estate workers. A paramedic is responsible for outpatients department. If any patient requires admission or further treatment they are referred to the nearest government hospital.

The one hundred active TBAs in the district play an important role as they are highly regarded and respected by the members of the community. They are respected not only for the physical help they provide, but also for their humanitarian approach, and they get paid according to the means of the family they assist. They are reassuring unhurried and familiar to the people. They know and fully understand the local customs and they work within the framework of local beliefs and values. (1)

The TBAs in the Malaysian context can be divided into trained and partly trained. The untrained TBA has no formal training and the partly trained TBA has some basic training in the fundamentals of hygiene, cleanliness and asepsis. The daily routine of the TBA consists of attending to deliveries on request and visiting expectant mothers to advise on antenatal and postnatal issues. She also provides some nursing care to the babies and teaches the new mothers some basic steps on baby care.

Fig. 2 - SCHEMATIC REPRESENTATION OF A RURAL HEALTH UNIT FOR 50,000 POPULATION



MHC - MAIN HEALTH CENTER

HSC - HEALTH SUB CENTER

MCQ - MIDWIFE CLINIC AND QUARTERS

THE NEED TO IDENTIFY AND TRAIN THE TBAs IN MCH CARE

In the study area the data collected for high risk approach in maternal and child health care showed that 93.8% of women booked themselves with the government midwife for delivery and that they had their antenatal care in the health centers but when the women went into labour 40.2% still called the traditional birth attendant for delivery instead of going to the hospital or calling the government midwife. (unpublished date)

A significant number of deliveries are being conducted by the TBAs in the district and though this trend is declining, a large number of women still depend for delivery and advice on MCH problems on the TBAs.

The existing health care delivery system in the district cannot cope with all the deliveries in the district, and the presence of and the wide distribution of the TBAs cannot be ignored for the effective and efficient delivery of the maternal and child health care. For every government midwife in the rural area there are about 3 TBAs. Every TBA attends to an average of eighteen deliveries per year as compared to thirty by the government midwives.

The TBA is older and usually more popular than the government midwives in most instances, and she also performs most of the customary duties of the rural Malays, which may not be performed by the government midwives. It is recognised that the TBA is still a viable force in the delivery of MCH care. The TBA has been utilised for family planning purposes in Malaysia Before. (8) Many other countries have also recorded the utilization of the TBA for family planning and maternal and child health care purposes (9, 10, 11, 12, 13, 14) Although not all the training programs had been successful, (14) it was still decided to train and utilise the TBA in this area after careful consideration. But before a full scale training was implemented, a knowledge, attitude and practice study (KAP) was done on the TBAs.

KAP STUDY

The study was carried out from 17th to 27th June 1979. During this study all the TBAs were interviewed. The questionaire used in this study had been protested in another district. A total of ninety seven TBAs were interviewed. Only 67 (89%) had formal education at the primary school leve. Seventy four (76%) were more than 55 yrs of age and majority (82%) had more than 10 yrs experience in the community. Only in 40% the profession was passed from mother to daughter. All of them were aware of the midwife clinics, health centers and hospitals. Sixty percent had received family planning training before and all of them were aware of the family planning methods. Their attitude towards modern medicine was positive and they also had some knowledge of modern medicine. It was interesting to note that they also advised the pregnant mothers to attend the antenatal care sessions in the government clinics and health centers.

When practices were examined it was found that they conducted all types of cases, irrespective whether the cases were 'at risk' or not. They practised traditional customs like advising pregnant mothers on traditional diet especially what diet to take during pregnancy and what not to take. They also performed some form of traditional abdominal massage during delivery and they also advised mothers to do heat formentation after the delivery which was harmful to the mother because it caused dehydration. In 1978 the TBAs conducted 1975 deliveries (approx 40% of the total in the district) of which eighty five were identified as risk cases.

It was found that the TBA not only functioned as a midwife but also catered to the cultural needs of the family. Inspite of the fact that they were aware of the hospital and health centers they still conducted one third of the deliveries, and many of the cases conducted were 'at risk' cases. Therefore it was decided to train the TBAs and to introduce a system of monitoring the activities of the TBAs.

TRAINING OF THE TBAs

Once the need for the training of the TBAs was identified, the content, the duration and the place of the training of the TBAs was discussed. It was decided that the training of the TBAs would be held in the health office and the district hospital surrounding. It was decided that the training would be held every saturday for six consecutive weeks due to the limited availability of the funds. Transport would be provided for the TBAs from their homes to the health office where the training will be conducted. As an incentive for the TBAs it was decided to give the TBAs a midwifery kit at the end of the training. Public health nurses were selected to train the TBAs because of their familiarity with the TBAs. The public health nurses were given a short training by the medical officer and the senior health nurse in the district.

The content of the course was limited to practical nature and emphasis was given on observational and practical issues. The lectures were limited to a bare minimum and most demonstrations were of normal procedures in maternal and child health care. Flip charts, diagrams and pictures were shown wherever possible. They were also thought simple hygenic procedures, cleanliness and basic nutrition for mothers and children. To familiarise them with the hospital surroundings they were taken around the hospital especially the maternity and the children's wards. They were introduced to the hospital personnel and the main problems encountered in MCH care were explained to them. The harmful practices were discouraged and the unharmful practices were left alone.

MONITORING AND SUPERVISION

It was decided to monitor and supervise the TBAs after training. A book to monitor them is to be maintained by the public health nurse at the health center level. It was also decided that all pregnant mothers who were using the TBAs were told to go to the health center for screening purposes. Here the public health nurse would decide whether the case is 'at risk' or not 'at risk'. If the case was identified as 'at risk' case the TBA was not supposed to take the case during delivery. The public health nurse would keep a record of all the pregnant mothers who are attended by TBAs in her service area. The midwifery kit which is given to the TBAs is to be used during the time of delivery and the medicines in the midwifery kit could be replenished from the health center free of cost.

RESULTS

The training and utilization of the TBA has shown a tremendous improvement in the MCH Care in the district. As shown in Table I the number of Hospital deliveries has increased from 29.5% in 1976 to 35.9% in 1983. Similarly the government midwife has shown improvement by increasing the number of deliveries from 23.3% in 1976 to 40.2% in 1983. The number of deliveries being conducted by the TBA has decreased

TABLE I LIVE BIRTHS IN KERIAN BY PERSONNEL OF DELIVERY (1976-1983)

Year	Hospital Deliveries	% (total)	Government Midwives	% (total)	TBA's (total)	%	Maternity Homes	% (total)	Total	%
1976	1386	29.5	1095	23.3	2218	47.2	—	—	4699	100
1977	1289	27.4	1337	28.5	2071	44.1	—	—	4697	100
1978	1329	29.6	1421	31.7	1735	38.7	—	—	4485	100
1979	1550	33.4	1207	26.0	1868	40.2	18	0.4	4643	100
1980	1486	33.3	1345	30.1	1613	36.2	19	0.4	4463	100
1981	1733	36.5	1462	34.7	1331	28.2	32	0.6	4738	100
1982	1726	37.8	1685	36.8	1081	23.6	85	1.8	4577	100
1983	1640	35.9	1835	40.2	884	19.4	165	3.6	4524	100

TABLE II HEALTH STATISTICS OF KERIAN (per 1000) (1976-1983)

Year	I.M.R.	T.M.R.	M.M.R.	C.B.R.	C.D.R.
1976	40.52	3.0	1.89	26.15	5.70
1977	34.27	1.99	1.46	25.54	4.71
1978	27.42	1.80	1.98	23.77	4.48
1979	29.50	2.12	1.06	23.26	4.09
1980	27.11	1.87	1.10	22.47	4.01
1981	23.64	1.13	0.84	23.58	3.47
1982	21.72	2.50	—	29.03	3.63
1983	25.52	1.80	1.09	28.70	4.50

from 47.2% in 1976 to 19.4% in 1983 inspite of the training given to the TBAs. This suggests that there is a trend to utilise qualified personnel instead of unqualified personnel (TBAs). (3)

Similarly the identification of 'at risk' cases in the health centers and referral to hospitals has helped to improve the quality of care. There are more 'at risk' cases referred to the hospital than it was previously. It is noticed more primigravida and multigravida are referred to the hospital than it was in 1976.

Table II shows that the utilization of the TBA in MCH care has shown a constant decline in mortality rates. The maternal mortality rate in particular has shown a significant decline.

However, it is noticed that among the cases which are conducted by the TBAs one third are still 'at risk' cases. The main purpose of the training program is to decrease the number of the 'at risk' cases conducted by the TBAs and to refer these cases to the hospitals.

DISCCUSION

Traditional birth attendants have existed from time immemorail and today with or without legal permission, they continue to conduct deliveries in many third world countries. Their importance in this respect is indicated by some estimates that they conduct approximately two-thirds of the world's babies. (7) Because of the significant role played by the TABs in the MCH Care in the study area their identification and training proved to be useful. Similar form of training have been done in other countries. (12, 13, 15)

The TBA is a useful 'untapped resource' in the delivery of MCH care. They are popular in the village and they perform most of the traditional duties during labour which are not all performed by the government midwives in the Malaysian context.

There had been no control of the TBA's work previously and with some supervision and monitoring of the TBAs it is seen that more 'at risk' cases are referred to the hospital. Some of the 'at risk' mothers and children are identified early and referred to the hospitals thus reducing the bad outcomes significantly. It is hoped that the hospitals would be conducting all the 'at risk' cases and the government midwives and the TBAs conduct the normal deliveries. The TBAs have also been advised to refer low birth weight babies to the nearest hospital.

The UNICEF midwifery kit given to the TBAs has been very useful. The TBAs are now trained to take the birthweight and the delivery process is much cleaner and healthier and more importantly the coordination between the government midwife and the TBA has improved tremendously. This is mainly due to the fact that the TBA now conducts the deliveries in a much cleaner and healthier environment which in turn gives less problems for the government midwives.

The monthly meetings between the public health nurses and the TBAs to review the progress regularly has been very useful. The TBAs now come forward with problems and discuss with the nurses and the government midwives. The TBA training program has positively influenced the MCH care significantly in the district and it is encouraged that countries with limited resources should look to the possibility of using this resource for the attainment of primary health care for all by the year 2000.

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