

Attitudes and practices of traditional birth attendants in rural Ghana: implications for training in Africa *

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A survey of the characteristics, attitudes and practices of traditional birth attendants (TBAs) was carried out in the Danfa Project area of rural Ghana. The typical TBA was an elderly illiterate housewife or farmer who practises midwifery part-time: 48% were men who often practised herbalism as well. The TBAs usually gave correct or neutral advice and, although they delayed in referring some complications to hospital, most saw the benefits of rapid referral for serious problems. They were supportive of family planning and very interested in improving their skills. However, a number of factors must be considered in organizing training programmes. Special adult educational methods must be employed. To achieve adequate coverage one must train large numbers of TBAs, who perform an average of only seven deliveries per year and who are widely scattered in remote rural villages. This poses formidable problems, especially in transportation and follow-up supervision. Combining TBA training with other village health programmes or community development projects could provide a solution.

Traditional practitioners continue to provide a large part of the primary medical care in Africa. In Ghana, 75% of all deliveries are either unattended or attended by untrained personnel (relatives or traditional birth attendants). In rural areas the percentage is higher and the maternal mortality rate is estimated to be at least 5 per 1000 live births. It will be many years before modern midwifery services are accessible to the majority of rural African women. Interest is therefore growing in training traditional birth attendants (TBAs) to improve their skills and to recognize and refer high risk pregnancies and

complications (1). There is also interest in eliciting the cooperation of TBAs in the promotion of family planning (2).

The training and integration of traditional birth attendants into a comprehensive maternal health programme is planned as an important aspect of the Danfa Comprehensive Rural Health and Family Planning Project (3, 4). There have been previous studies on midwifery practices among the Ga people (5, 6), the largest ethnic group in the Danfa Project district, but additional information is needed to serve as a guide for training and as a baseline for evaluation. This paper describes the results of a survey of 82 of the 263 TBAs previously registered in the Danfa district. The survey was designed to elicit current information about the technical nature of their practices and their attitudes towards training and family planning.

THE SURVEY AREAS

The four study areas of the Danfa Project " are located in a rural district centered about 29 km north of Accra. They cover 520 km² and contain

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" The Danfa Project is an eight-year training, research, and demonstration project undertaken jointly by the Ghana Medical School and the School of Public Health of the University of California at Los Angeles.

310 villages and 60 000 people, most of whom live in villages with 100–400 inhabitants. The general fertility rate is 220 per 1000 women aged 15–44 years; the birth rate 48 per 1000 population. The annual rate of natural population increase is 3.2%. Maternal mortality is estimated at 5 per 1000 live births. The infant mortality is 100 per 1000 live births with 50% of deaths occurring in the neonatal period. The percentage of the neonatal deaths attributable to tetanus is not known, but it seems to be less than that reported from other areas of West Africa. Although 92% of women attend antenatal clinics staffed by professional midwives only 33% are delivered by trained personnel. Another 30% are delivered by TBAs; 20% are delivered by relatives and 17% deliver themselves (Nicholas, unpublished observations, 1975).

SURVEY METHODS

In 1972 we registered all TBAs in the three Danfa study areas that were to receive family planning services. Two nurses visited each village and, with the cooperation of the chiefs and schoolteachers, registered each TBA and recorded basic information on age, sex, years in practice, and estimated number of deliveries in the past year. Results of this registration, previously reported in part (7), showed that the typical TBA was 62 years old, had been in practice 23 years and performed only 7 deliveries per year. The ratio of TBAs to population was 1 to 137; 48% were men. Only 6% of the TBAs registered performed 20 or more deliveries per year and there was no relationship between age of TBA and number of deliveries performed each year (Table 1).

In 1973, six months after the start of the family planning programme, we administered a question-

naire to a sample of the TBAs registered. The sample included all the TBAs in study Area I, where we were planning to begin a training programme and 17% of those registered in study Areas II and III. Interviews were carried out in the local language by public health nurses familiar with the area. We also asked 60% of the TBAs in Area I to demonstrate some of their diagnostic and treatment methods.

FINDINGS AND COMMENTS

Eighty-two interviews were completed; 52 in Area I (76% of TBAs registered in that area) and 30 in Areas II and III (17%); 34% of those interviewed were men. Differences in interview responses between areas were negligible and combined results are reported for the three areas.

Characteristics of the TBAs

Of all TBAs registered, those interviewed were representative as regards age, years in practice, and number of deliveries performed each year. Two-thirds gave farming as their principal occupation and 94% were illiterate. Half of the TBAs were Christian; the remainder adhered to traditional religious beliefs. Although younger members of the community receive more education today, the TBAs interviewed were typical of their age groups in education, religion, and occupation. All of the TBAs spent a period of apprenticeship before engaging in solo practice. Usually their mentor was a parent or grandparent.

Our interviews showed that there were two types of TBA: herbalists who engaged in midwifery as only part of their medical practice and those who

Table 1. Distribution of TBAs by age group and number of deliveries performed annually as reported in 1972 registration

Age group (years)	No. of deliveries performed annually					Not reported	Total No. (%)
	0–4	5–9	10–19	20–29	30 +		
20–39	5	2	1	—	—	—	8 (3.0)
40–49	27	9	5	1	—	3	45 (17.1)
50–59	22	16	8	2	3	3	54 (20.5)
60–69	31	27	8	4	—	2	72 (27.4)
70 +	35	34	9	2	4	—	84 (31.9)
Total No. (%)	120 (45.6)	88 (33.5)	31 (11.8)	9 (3.4)	7 (2.7)	8 (3.0)	263

limited their practice to midwifery. Of the male TBAs in this study, 79% were herbalists, compared with 11% of the female TBAs. In general, only the herbalists provided any prenatal care; they were also more likely to attempt treating complications of pregnancy and delivery. Those TBAs engaged solely in midwifery were usually called only after labour had begun. Thus, seeing women in the antenatal period to screen for high-risk pregnancies would be a new service for many of the TBAs.

Traditional midwifery is a part-time occupation; male TBAs averaged 8.5 deliveries each per year and female TBAs 4.4. Although 87% of female TBAs delivered women only from their own village, 25% of male TBAs reported that they had clients from more than 8 km. Often women who had difficulty becoming pregnant or with previous deliveries would seek treatment from a well known herbalist, many of whom gain reputations that attract women from some distance.

Most of the TBAs thought that the community believed they rendered a useful service. Some of the TBAs, especially the herbalists, reported that they were also regarded with suspicion because villagers believed they were capable of harming the fetus by using evil charms to cause illness in the womb. These illnesses were believed to produce a number of problems such as infertility, haemorrhage, miscarriage, and failure of the fetus to thrive. Many of the TBAs claimed to have herbs to prevent these diseases or antidotes to counteract their effects. TBAs were viewed with a mixture of admiration and suspicion and were not expected to solicit pregnant women to attend their clinics. Such encouragement could be misinterpreted as undue interest with evil intent.

Maternal health care

Most TBAs prayed before beginning a consultation. The patient was then asked about the duration of pregnancy and any unusual symptoms. Few enquired about previous obstetric history. Apart from a missed menstrual period, the TBAs reported paleness, darkening of the nipples, and enlargement of the breasts and abdomen as the common signs of pregnancy. The TBAs stood either in front of or behind the patient for examination purposes, placing their hands on the sides of the abdomen to lift and shake the uterus, pausing afterwards to feel fetal movements. From these manoeuvres the TBAs said they were able to determine the condition of the pregnancy, the position of the fetus, and whether

the woman was in labour. Only a few TBAs reported that they gave nutritional advice during pregnancy.

The interviewers questioned the TBAs about antepartum complications such as haemorrhage, weakness, fever, seizures, oedema and excessive vomiting. Apart from fever, which 73% attributed to malaria, few had any knowledge of the scientifically known causes of these conditions, and many had never seen these problems because they did not provide prenatal care.

The TBAs determined the onset and course of labour from a history of the contractions, bleeding or rupture of the membranes, and by palpating the abdomen for contractions or position of the head. Only 2% performed any vaginal examinations to determine the descent of the head. Almost all delivered the baby with the mother in the squatting position. TBAs reported that during the second stage of labour fundal pressure was exerted as the woman strained. Herbs were given during labour to increase contractions and speed delivery by 39% of TBAs. The most common reason given for prolonged labour was that it was the nature of the baby or the labour. Other causes mentioned were small pelvis, disease in the mother, or inability of the mother to push because of pain or fatigue. There is still some superstition associated with prolonged labour as 6% attributed it to unfaithfulness on the part of the mother and 5% to controversy between the parents.

Most had seen heavy bleeding during labour. Common reasons mentioned for this condition were disease in the womb and excess blood in the mother. The latter is a dangerous concept in that it implies that excessive bleeding is a natural occurrence and might preclude or delay referral. Most of the TBAs did nothing special to prevent tearing of the perineum which most believed was caused by a large baby or small outlet. Others felt that it was a normal event. The most common treatment was a sitz bath with salt, herbs, camphor balls, or antiseptic added.

Malaria was considered to be the most common cause of postpartum fever; only 4% mentioned infection of the womb. The majority stated that loss of more than 500 ml of blood postpartum was abnormal. To replace blood loss, reduce pain, or help heal the wound 58% gave herbs postpartum and about 50% referred complications of pregnancy, labour, and the postpartum period to hospital. The others tried a herbal treatment first but if the problem persisted they nearly all referred the woman to hospital.

Only 22% of the TBAs (mostly herbalists) treated infertility. The most common causes of infertility listed were disease in the womb, evil forces in the family, repeated induced abortions, promiscuity, and venereal disease. A third of the TBAs said it was natural in some women.

Child care

Most TBAs used a new razor blade to cut the cord and this indicates that some aspects of improved midwifery may have already reached these areas. Others used a knife, an old razor blade, broken glass, or scissors. These instruments were usually not washed or sterilized in any way prior to use. The most common cord dressing applied was a mixture of herbs and salt, and other materials used included ground shells, talcum powder, clay, and palm kernel oil. Animal dung was rarely used as a dressing in this area. Although a new razor blade may carry only a small risk of infection with tetanus, the other instruments and dressings used must all be considered unsafe. When the interviewer described the symptoms of neonatal tetanus, 78% said they had either seen or heard of such a case.

Most TBAs attributed respiratory problems at birth to the infant being tired after delivery. Stimulatory remedies such as pouring cold water on the baby, slapping the buttocks, or smearing irritating herbs on the skin were often applied. Fever in the newborn was most commonly attributed to malaria. Three-quarters of TBAs did not routinely prescribe medicines for infants. Of those who did, half prescribed herbs, the rest castor oil or non-toxic substances such as glucose. Other than advising breastfeeding, only 29% gave advice on infant feeding during the first week of life, usually recommending sugar water, coconut water or diluted milk as supplements.

The TBAs were asked why some women deliver small babies. While 30% said it was a natural occurrence, 27% attributed it to prematurity, and 21% to disease in the uterus. A few treated pregnant women with herbs to reduce the likelihood of delivering a small baby. No TBA mentioned special measures to keep the premature baby warm other than advising the mother to use warm water when bathing the child.

Most TBAs did not care for a child after the first week of life although 15% occasionally gave some advice. We asked the TBAs why some children become malnourished after the age of 6 months. The most frequent answers given were insufficient

food, insufficient breast milk, fever, teething, and malaria. The typical TBA advised mothers to supplement an infant's diet at four months and to breastfeed for 12 months. Two-thirds said that a child should be eating an adult diet by the age of 1 year. Although 10% attributed congenital malformations to evil forces, curses, or punishment, none recommended infanticide for such problems as was reported in previous Ga studies (5).

Family planning

The TBAs were more interested in promoting family planning than one might have expected of elderly traditional practitioners in rural Africa: 95% felt women should space their births in order to protect the health of the mother and child and 81% approved of couples doing something to postpone pregnancy; 83% had heard of "family planning" and 70% approved of it. Half had advised women to postpone pregnancy and 13% had actually prescribed a method. The extent of their knowledge of methods is shown in Table 2. The percentage of TBAs that showed knowledge of a method was much higher with aided recall. Few TBAs recognized a relationship between breastfeeding and diminished risk of pregnancy. Of those who knew of rhythm, 72% described "safe" periods that must be considered partly or wholly unsafe.

Two-thirds of the TBAs felt that women in their villages would be interested in family planning; the remainder were unsure. Few thought their

Table 2. Family planning methods known by TBAs

Method	Percentage of TBAs responding	
	Spontaneous	Recall after questioning
Abstinence	71	93
Rhythm	37	84
Withdrawal	21	76
Prolonged breastfeeding	2	22
Condom	5	68
Foam	0	41
Pill	2	67
IUD	4	76
Sterilization	1	94
Other	5	2

work would be affected if women adopted family planning. This knowledge and support of family planning may be related in part to recent government information programmes, the Danfa Project's family planning activities, and the proximity of the area to Accra. However, traditional beliefs about the need for child spacing are also compatible with many modern ideas about family planning.

Attitudes towards training

Nearly all the TBAs had heard of the work of government midwives in their area. They felt that the government midwives' work differed from their own in that the professional midwife gives injections, has book knowledge, can handle complications, records her work on paper, and delivers infants with the woman in the supine position. Interest in receiving training in modern midwifery and family planning and in cooperating with the health centre staff in a programme of improved maternal care was shown by 68%. All would refer serious problems and 83% said they would refer women for family planning.

DISCUSSION

The TBAs interviewed in this study were very interested in receiving training to improve their

skills. However, this study brings out some of the problems that must be overcome in organizing such training programmes in Africa and integrating the TBAs into a district health programme. Since most are illiterate, special educational methods have to be designed. Adult education experts could help in developing effective training programmes. Nevertheless, because of advanced age many of the TBAs could only be expected to provide a limited number of years of service after training. While they might pass on their improved knowledge and practices to their apprentices, the training of apprentices should be considered and younger literate people should be encouraged to enter practice and be trained. However, this could pose problems if the older TBAs felt threatened, or if these younger people demanded to be incorporated into the civil service structure after training.

The TBAs are often scattered in remote villages and most perform only a small number of deliveries each year. To achieve adequate coverage one would have to contact and train large numbers of TBAs. This would present difficulties, especially in transportation and supervision. These could be reduced, however, by combining TBA training and supervision with other village based health programmes or community development projects.

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RÉSUMÉ

ATTITUDES ET PRATIQUES DES ACCOUCHEURS ET ACCOUCHEUSES TRADITIONNELS EN MILIEU RURAL AU GHANA, ET PROBLÈME DE LA FORMATION EN AFRIQUE

Les accoucheurs et accoucheuses traditionnels (AT) apportent leur aide dans un grand nombre d'accouchements au Ghana et l'on envisage de plus en plus de les former afin d'améliorer leur compétence et d'encourager la planification familiale. Le présent article fournit les résultats d'une enquête sur les caractéristiques, les connaissances, les attitudes et les pratiques de 82 AT sur les 263 qui sont enregistrés dans la zone du projet Danfa en milieu rural au Ghana.

L'obstétrique traditionnelle n'est pas une profession exclusive. L'AT type est une personne d'un certain âge, ménagère ou fermier, illettrée, qui exerce depuis 23 ans, mais ne fait que sept accouchements par an. La propor-

tion d'AT par rapport à la population est de 1:137; près de la moitié (48%) sont des hommes. Il existe deux types d'AT: les guérisseurs par les simples, pour lesquels l'obstétrique ne représente qu'une partie de la pratique médicale, et ceux qui limitent leur pratique à l'obstétrique. En général, seuls les guérisseurs donnent quelques soins prénatals.

La majorité des AT fournissent des conseils corrects ou neutres, mais rares sont ceux qui possèdent, sur les complications de la grossesse, la moindre connaissance des causes scientifiquement établies. Certains traitent ces troubles par des simples, mais presque tous adressent les malades à l'hôpital si le problème persiste ou s'il se

présente d'emblée comme sérieux. Les AT examinent l'abdomen pour obtenir des renseignements sur la grossesse, la position du fœtus ou le stade du travail. Généralement, les parturientes sont en position accroupie, les AT leur administrent des simples pour accroître les contractions et accélérer l'accouchement. Ils ne font rien pour prévenir les déchirures du périnée, qui sont traitées par des bains de siège. Le plus souvent, les AT coupent le cordon avec une lame de rasoir neuve, et utilisent un mélange d'herbes et de sel comme pansement ombilical.

La majorité (81%) des AT interrogés approuvent les couples faisant quelque chose pour retarder la grossesse et espacer les naissances, 70% sont partisans de la « planification familiale »; 68% souhaitent recevoir une formation en matière d'obstétrique et de planification familiale, et participer à un programme d'amélioration des soins aux mères.

Cette étude illustre certaines des difficultés qu'il faut surmonter pour organiser ces programmes de formation en Afrique et pour intégrer les AT dans un programme sanitaire de district. La plupart des AT étant analphabètes, il convient de mettre au point des méthodes spéciales d'enseignement pour adultes. Après formation, ces AT, qui sont d'un certain âge, ne pourront assurer de services que pendant un nombre limité d'années. Les AT sont souvent dispersés dans de lointains villages et la plupart n'accouchent que peu de femmes chaque année. Pour obtenir une couverture suffisante, il faudrait se mettre en rapport avec de grands nombres d'AT et les former, ce qui pose d'énormes problèmes de transport et de contrôle intérieur; certains de ces problèmes pourraient être résolus si l'on combinait la formation des AT avec d'autres programmes de santé des collectivités.

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