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An Assessment of the Training of the Traditional Birth Attendant of Rural Malaysia

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Introduction

IT HAS BEEN estimated that between 50 to 80% of all domiciliary deliveries in the developing countries of Southeast Asia are attended by traditional birth attendants. For example it is estimated (Verderese & Turnbull, 1975) that 80-90% of domiciliary deliveries in Indonesia, 75% in Thailand, 48% in the Philippines and 50% in Malaysia were attended by traditional birth attendants known variously as *dukun bayi* (Indonesia) *mohtamyae* (Thailand), *hilots* (Philippines) and *bidan kampung* (Malaysia).

During the past two decades, modern midwifery has been gradually introduced into the rural areas of most of the Southeast Asian countries. Not only have young women been trained as auxiliary midwives for work in rural communities but some of the traditional birth attendants have been provided with varying amounts of training in simple hygiene, sterile techniques, elements of modern midwifery and family planning. For example, over 2900 *hilots* in the Philippines (Mangay-Angara, 1974), 8410 traditional birth attendants in East Java (Wasito, 1974) and about 16,000 *mohtamyae* in Thailand (Asavasena, 1974) have received some training.

Unlike the young educated women who are trained as auxiliary midwives, traditional birth attendants are usually older, illiterate women past the menopause who have borne one or more children herself. Being illiterate they are naturally more difficult to train and it has often been said that they infact are unable to benefit from the short training courses which are thus a waste of time and effort. This paper presents the findings of an assessment of the training given to the *bidan kampung* of a rura Malay community in Kedah, Malaysia, and is derived from a larger study conducted in connection with a doctoral thesis (Chen, 1975).

Field Methods

The rural Malay community selected for the study had a total of six resident *bidan kampung,* four of whom had had some training from the local health staff. In order to assess whether the four who had been partly-trained were "safer" than the untrained *bidan kampung,* it was necessary to study in detail their professional activities and to catalogue all the births attended by them over a number of years. Details of the field techniques are given in the doctoral thesis (Chen, 1975) and will not be elaborated here.

The Untrained *Bidan Kampung*

The *bidan kampung* is a highly respected member of the community and is referred to by the honourific title of *tok,* an honour denied to the trained government midwife. The *bidan kampung* usually operates in a relatively restricted geographical area in her own village, and has learnt the art of midwifery from some older *bidan kampung* who might have been a mother, aunt or grandmother. She is respected not only for the physical help she provides but also for her humanitarian approach, being paid according to the means of each family she assists. She is a reassuring figure who is patient, unhurried, and familiar. She knows and understands the local customs and works within the framework of local beliefs and values. For example, since the rural Malay believes that childbirth attracts

various evil spirits including the vampire spirit called the *Hantu Penanggalan,* she will place the leaves of some thorny bush under the raised floor of the house as a protective measure to keep the evil spirits at bay. Such measures might seem foolish or unaesthetic to the culturally ethnocentric but are nevertheless psychologically reassuring to mothers and should thus not be discouraged. Many other practices, some of which are beneficial, others of which may be harmful, have been described elsewhere (Chen, 1973) and will not be elaborated here. Instead, in the paragraphs that follow, only the major harmful practices will be mentioned.

Among the more harmful of the practices followed by untrained *bidan kampung* is a group connected with the management of labour. So long as labour is normal, the *bidan kampung* will not interfere and the outcome is most commonly quite satisfactory. However when labour is prolonged she may massage the uterus and try to by external pressure to forceably expell the foetus, but as has been noted (Sambhi, 1969; Thambu, 1971), rupture of the uterus may occur from such an act. Secondly, when there is a delay or a complication, she will call the *bomoh* (medicine-man) to recite his *jampi* (incantations) instead of sending the mother to hospital. Thirdly, should she perceive an undue delay in the expulsion of the placenta, she will hasten the process by massaging the uterus and force the placenta out by pulling on the umbilical cord. Inversion is a risk, but more commonly post partum haemorrhage will be induced. Fourthly, when the placenta has been expelled, and since she traditionally does not have a delivery kit, the umbilical cord is rubbed with ashes from the kitchen hearth, knotted seven times and cut over a piece of *kunyit* (tumeric) "to keep wind out", the cord being cut with a freshly prepared *sembilu* (sharp sliver of bamboo). The risk from neonatal tetanus is obviously great.

During the postnatal period, the major harmful practices supported by untrained *bidan kampung* are the two related to the cultural belief that the mother must avoid "cooling" foods and must "roast" herself to avoid harm. Thus, during the first 44 days after childbirth, it is culturally believed that the new mother must avoid "cooling" foods such as pineapples, citrus fruits, cucumbers, papayas, and most green leafy vegetables. In addition foods that are *bisa-bisa* ("poisonous") such as prawns, cuttlefish, catfish, cockles, *belacan* (prawn paste) and certain types of fish, as well as foods reputed to "carry wind" such as cassava, cassava tips, sweet potatoes, pumpkin, taro, maize and jackfruit are scrupulously avoided. On the other hand, "heating" foods such as pepper, chillies, smoked or salted fish, eggs and coffee are advocated. In practice, the resulting diet usually consists of rice, pepper, chillies, dried or salted fish and coffee. Such a diet has been found to result in low serum levels for folic-acid, carotene and iron (Wilson *et al.,* 1970).

It is also believed that the mother's body is vulnerable to "cold" and to "wind", and to protect her, the mother is expected to "roast" herself each day. She may either *bersalai,* "roast" herself by lying on a platform built over a fire, or she may *berdiang,* "roast" herself by sitting with her back close to the hearth (Fig. 1). Both these practices are supported and supervised by the *bidan kampung,* and are known to cause congestive cardiac failure and death. A similar phenomenon has been observed among Muslim women of Northern Nigeria who practise a similar form of puerperal "roasting".

Fig. 1
A *bidan kampung,* the traditional birth attendant, supervises the "roasting" of a new mother who sits with her back against a fire. This practice sometimes leads to acute congestive cardiac failure and death.

The Partly-trained *Bidan Kampung*

The training of *bidan kampung* varies from locality to locality both in terms of content as well as in terms of time and effort spent. For the district of Kubang Pasu, training as it was conducted in the 1960s consisted of a simple series of six weekly afternoon classes that aimed to teach the *bidan kampung* the fundamentals of hygiene, cleanliness and asepsis and also aimed to point out the dangers of some of the traditional practices and the necessity of calling for help when danger signs are noted. At the termination of these classes, each *bidan kampung* may be given a UNICEF delivery kit (Fig. 2). However not all such courses were terminated in this fashion and the majority of partly-trained *bidan kampung* in fact are expected to purchase their own locally assembled delivery kits.

Fig. 2
A partly-trained *bidan kampung* prepares to lay out her UNICEF delivery kit in preparation for a birth.

The partly-trained *bidan kampung* are encouraged to attend monthly "supervision classes" where they continue to receive instruction on hygiene, need for antenatal care, need to avoid dangerous traditional practices and the need to refer complications. At these "supervision classes" they are expected to account for all the deliveries attended by them. Guidance is given if any problems are brought up. Delivery kits are inspected and stocks are replenished. Due to the shortage of staff, no supervision beyond these monthly "supervision classes" are provided.

The Effects of Training

The effects of the training of *bidan kampung* can be looked at in terms of whether the partly-trained *bidan kampung* avoid the harmful practices mentioned earlier, whether they are more hygienic in their procedures, whether they refer women for antenatal care and whether they emphasize the need for family planning and for the care of the newborn and young child. The ultimate test is of course that associated with mortality.

Avoiding harmful practices

It was noted that all partly-trained *bidan kampung* were aware of the dangers associated with attempts to forceably expel the foetus or placenta and indications are that, unlike the untrained *bidan kampung*, the partly-trained *bidan kampung* no longer practised these manoeuvres. There is also evidence that, when there is a delay in the progress of labour or when a complication sets in, the partly-trained *bidan kampung* no longer send for the *bomoh* but instead send either for the trained midwife or send the mother to hospital.

In terms of the *berdiang* and *bersalai* practices and of full adherence to postnatal dietary taboos, it was noted that women who select the partly-trained *bidan kampung* are less fastidious than mothers who select the untrained *bidan kampung*. One can only speculate whether this is the result of maternal selection of midwife or the influence of midwife on maternal practices. Nevertheless the fact remains that these two harmful traditional practices are less fastidiously adhered to when the partly-trained *bidan kampung* is the midwife than when the untrained *bidan kampung* is the one.

Importance of cleanliness

There is no doubt that the partly-trained *bidan kampung* are less unhygienic with regard to cutting and dressing the umbilical cord than the untrained *bidan kampung*. Not only have they discarded the *sembilu* (sliver of bamboo) and replaced it with a pair of scissors, but they have also discarded the traditional cord dressings for flavine-in-spirit. As was noted earlier, each has a delivery kit, which has as a minimum, a pair of scissors, artery forceps, cord ligatures and antiseptic lotion, and was able to demonstrate that she knew how to sterilize a pair of scissors or forceps. It was also noted that the best trained was able to sterilize cotton swabs and was cleanest, while the least trained was the least hygienic of the lot.

Antenatal care

It was noted that whereas only five (4%) mothers delivered by the partly-trained *bidan kampung* did not receive any antenatal care at all, five (17%) mothers delivered by the untrained *bidan kampung* did not receive any antenatal care, and that the average number of antenatal visits made by mothers delivered by the two types of *bidan kampung* were 5.4 and 3.4 respectively (Table 1), indicating that the training of *bidan kampung* tended to make them more willing to send their patients for antenatal care from the trained midwife.

Table I

Distribution of 283 mothers by number of antenatal visits and type of midwife

Number of antenatal visits	Number of mothers whose most-recent-births were attended by:				Total
	hospital midwives	trained midwives	partly-trained *bidan kampung*	untrained *bidan kampung*	
0	0	2	5	5	12
1 – 2	0	5	13	3	21
3 – 4	3	30	28	12	73
5 – 6	8	44	37	6	95
7 – 8	3	9	21	2	35
9 – 10	2	18	12	1	33
11 – 12	1	5	5		11
13 – 14	1	2			3
Total	18 (6.7)	115 (5.9)	121 (5.4)	29 (3.4)	283

Mean number of visits are given in parentheses.

Mortality rates

Whether the training of *bidan kampung* is effective or otherwise is ultimately related to whether the maternity care given by each is associated with a high or a low mortality. From Table II it will be noted that the mortality rates from neonatal causes, perinatal causes and neonatal tetanus associated with the delivery of the mother by the trained midwife, the partly-trained *bidan kampung* and the untrained *bidan kampung* are inversely related to the amount of training received. Thus the rates are highest among births attended by the untrained *bidan kampung,* intermediate among those attended by the partly-trained *bidan kampung* and lowest among those attended by the trained midwife.

Table II

Mortality per 1000 live births by type of mortality and type of midwife

Type of mortality	Mortality per 1000 live births		
	trained midwife	partly-trained *bidan kampung*	untrained *bidan kampung*
Neonatal mortality	17	29	57
Perinatal mortality	41	54	69
Neonatal tetanus	–	12	34

Source: Chen, P.C.Y. (1975) Midwifery Services in a Rural Malay Community, M.D. Thesis, University of Malaya, Kuala Lumpur.

Limitations in the Training Programme

Instruction in the form of talks rather than of practical demonstration and supervision has been a severe limitation in view of the fact that *bidan kampung* are illiterate. It would be far more effective to use simple practical demonstrations, role-play, and practical exercises to teach *bidan kampung*. Simple practical procedures should first be demonstrated then repeated by the *bidan kampung* until she becomes fully conversant with it. It is important to provide practical instructions at each training session. In Indonesia the *dukun bayi* (traditional birth attendant) works in the antenatal clinic before she has a one-hour training session (Prawirohardjo, 1967).

In addition to the limitations mentioned above and to the *ad hoc* nature of training programmes, with the consequent lack of uniformity of duration and content, another important limitation has been the lack of field supervision and follow-up. Training was limited to the monthly "supervision classes" with no further supervision in the home or during delivery.

In terms of the content of training, the two most important limitations of the training programmes that were assessed were the total absence of any efforts to use the *bidan kampung* as recruiters of family planning acceptors and the lack of any attempts to train them in child care, although it

should be mentioned that more recently family planning has become incorporated into the training programmes.

As was mentioned earlier, *bidan kampung* are distinguished from ordinary women by virtue of their special skills and knowledge concerning child-birth in particular and maternal life in general. Further as highly respected members of the community, their support for any health programme can prove to be most useful while antagonism with them can easily lead to alienation of the programme by the community.

Discussion

The future

On the 20th of May, 1971, the Midwives (Registration) Regulations 1971 (Malaysia, 1971), was gazetted implementing for the first time the Midwives Act, 1966 (Malaysia, 1968) which had come into force on 1st August 1968. The essential difference between the Act of 1966 and previous ones was the fact that for the first time:

> "any person untrained in the practice of midwifery, who within four years of the commencement of the Act (i.e. before 1st August 1972), satisfies the Registrar that such person has during the period of two years immediately preceding application for registration under Part II of the Register, attended to women during child-birth"

shall be eligible to practise as midwives under Part II of the Register. Trained midwives who have passed the prescribed examinations and who thus qualify for registration continue to be registered under Part II of the Register, Part I being reserved for nurse-midwives.

Although registration of untrained persons closed on 31st July 1972, in effect registration was still continuing in July 1974 by which date a total of 1,850 had applied out of an estimated 4,000 *bidan kampung*. There is no doubt that many difficulties are being encountered in the implementation of the Midwives Act of 1966, and that the first of these concerns the satisfactory completion of registration so that the Register may be closed. By closing the Register, it will mean that the future recruitment of *bidan kampung* is being prevented and that young women who wish to be midwives may only do so by undertaking the training and examinations prescribed by the Midwives Board. Other problems lie in the area of training of these *bidan kampung* and the enforcement of the Act and its regulations.

Training the bidan kampung

From evidence gathered in the study community, there is no doubt that training does improve the standard of maternity care that the *bidan kampung* can offer. The WHO Expert Committee on Maternity Care (1952) and the WHO Expert Committee on Midwifery Training (1955) recommended that the traditional birth attendant should be trained, the main emphasis being on cleanliness, recognition of symptoms of abnormality during pregnancy and refraining from interference during labour. In 1961, the WHO Expert Committee on Maternal and Child Health recommended that supervision and refresher instructions should be given to traditional birth attendants at periodic intervals. In 1966, the WHO Expert Committee on the Midwife in Maternity Care (1966) noted that training programmes were already going on successfully in a number of countries and indicated that the traditional birth attendant should, with additional preparation, participate in preventive health measures related to the infant and young child. The role of the traditional birth attendant has been of particular importance in the developing countries. In Punjab, India, Taylor and Takulia (1971) report that *dais* (traditional birth attendants) have been a source of statistical information and help by bringing antenatal and postnatal mothers to the clinic.

Mettrop (1970) in relation to Malaysia pointed out that the *bidan kampung* should be seen as an arm of the health services and that her continuous training should be developed with patience and care. At the Inter-regional Seminar on the Role of the Midwife (Wld. Hlth. Org., 1970) it was noted that training should be in rural maternity centres near the vicinity of the midwife station. Arrangements should be such that they do not have to sacrifice income, and methods of instruction should rely mainly on practical demonstration and practice. Explanations and instructions should permit face-to-face interaction and should be in a spirit which makes them regard themselves as willing allies.

Training as a family planning motivator

Neumann *et al.* (1974) noted that traditional birth attendants should participate not only in the local maternal and child health programme but also in the family planning programme. Rosa (1967) pointed out that the *dais* (traditional birth attendants) of India if not adequately mobilized as family planning motivators, tend to be competitively antagonistic and become obstructions to family planning and other official maternal and child health work in the village. However not all efforts to use traditional birth attendants as family planning motivators has been successful. Gardezi and Inayatullah (1966) in their study of the role of the Pakistani *dais* in

family planning, note that the project failed as the *dais* were not opinion leaders but adoption agents. Further, Croley *et al.* (1966) noted that the Pakistani *dais* were responsible for only six per cent of deliveries. However, as noted in the present study, *bidan kampung* are highly respected members and handle substantial proportions of deliveries. Peng *et al.* (1972) noted that, unlike the Pakistani *dais,* almost all *bidan kampung* they studied expressed a willingness to participate in providing family planning services.

Since January 1972, the National Family Planning Board, Malaysia, with the aid of the University of Michigan, has been conducting an action study project to test the feasibility of using *bidan kampung* to recruit and resupply family planning acceptors. A total of 188 *bidan kampung* have been trained between January 1972 and April 1974, each *bidan kampung* being paid (M)$30.00 a month. Details of this project is given in a working manual for nurses (Peng, Ross-Larson and Subbiah, 1974) and indications are that the project will be a success.

Training the bidan kampung in nutrition, and in the care of the new-born and young child

Breast milk together with bodily stores is all that the infant needs for the first six months of life. Breast milk provides the correct dosage of all nutrients at low cost, protects with anti-infective agents, and ensures emotional support at a time when mental development is rapid and critical (Harfouche, 1970; Jelliffe and Jelliffe, 1971). It has been noted (Kanaaneh, 1972) that malnutrition among breast-fed infants is almost absent whereas 30% of bottle-fed infants have been found to be malnourished.

Undoubtedly the influence of respected women such as the *bidan kampung* can contribute substantially to efforts directed at encouraging mothers to breast feed their babies. Jelliffe and Jelliffe (1973) describe how the Indian *dai* (traditional birth attendant) acts as a *doulas* (bondswoman) supplying the additional information, and the emotional, physical and social support and assistance that ensures successful lactation. In addition, it should be possible, by training and enlisting the help of the *bidan kampung,* to influence the diet of children and mothers upon whom are imposed numerous dietary taboos (Wilson, 1971; Chen, 1973; Wilson, 1973).

Not only should the *bidan kampung* be trained to be an ally in nutrition education, but also in the care of the infant and young child. For example, she should be taught how to resuscitate the new-born and to aspirate mucus with a simple "mucus-sucker". In addition she should be taught to look for jaundice and other signs of ill-health and to refer such infants and children to the health centre or hospital for management.

Conclusion

Bidan kampung should be taken into account in the Maternal and Child Health Programmes of rural Malaysia since they are responsible for about 50% of the domiciliary deliveries that occur in rural Malaysia.

The training of the *bidan kampung* is of value and should be further developed, standardised and intensified. In order to prepare the *bidan kampung* for her new role in the Maternal and Child Health Services of Malaysia, her training should emphasize the avoidance of harmful traditional practices, the need for hygiene and asepsis, and the need for antenatal care, family planning and nutritional care of mother and the newborn. Regular supervision of the *bidan kampung* both at the health centre and at home should be developed.

Summary

With the introduction of modern midwifery into rural areas in Malaysia, not only have young women been trained as auxiliary midwives but some *bidan kampung,* most of whom are old illiterate women, have also received some training. In this paper the training of such *bidan kampung* is assessed and some suggestions are made as to the future. It is noted that the mortality rates from neonatal causes, perinatal causes and neonatal tetanus are highest among births attended by the untrained *bidan kampung,* intermediate among these attended by the partly-trained *bidan kampung* and lowest among those attended by the trained midwife.

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