The impact of family and budget structure on health treatment in Nigeria*

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Abstract

Health-treatment decisions, in much of the world, are affected by the family's ability to meet the cost. In West Africa the situation is more complex because husbands and wives typically have separate budgets. This article reports an exploration of the impact on treatment of divided family budgets in Nigeria where health services now charge for prescribed drugs. It was found that most child treatment is paid for by one person only, usually a parent, and that the treatment chosen is decided by the person meeting the cost. Mothers are most likely to pay for minor illnesses but the father's role becomes more important as the cost rises. Because the type, and even fact, of treatment depends on the ability to pay, and because the family is not a unity in these decisions, the health system may have to devise charging procedures that make both parents responsible, possibly with community involvement in securing payment.

Studies of access to treatment normally assume that such access is determined by preferences for specific medical systems and healers, the family budget, and gender and age priorities within the family. The situation in southern Nigeria is rendered more complex by the existence of wholly or partly separated budgets within the household. It is the purpose of this article to examine the budgetary situation and the impact of this characteristic of West African society on treatment. The research was carried out at a time when the cost of treatment had become more difficult for many families to meet than had been the case for a generation; hence a study of who makes treatment decisions and bears the cost is of particular importance both for understanding the influences on morbidity and mortality, and for suggesting interventions that would ease the most acute difficulties.

The increasing extent to which treatment decisions are conditioned by budgetary constraints arises from two related factors. The first is the collapse of high export prices for petroleum and the second is SAP, the economic structural adjustment program adopted to meet the difficulties created by the end of

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the oil boom. The prosperous oil boom years really began after the end of the civil war in 1970 and finally collapsed with the 1987 floating of the Naira (the Nigerian currency unit worth US$1 before the float and US11 cents at the time of the research) and imposition of certain import controls, notably on wheat flour and rice. One aspect of the new economic policies implemented even earlier than the full SAP program has been the imposition of charges for government health services and a move toward selling prescribed medicines at market prices.

The charging for health services from 1984 affected the whole of the rural population and made treatment compete with other personal and family costs. Such burdens became a matter for a great deal of discussion and complaint. Who bore the cost of treatment became an important matter. The cost of imported medicine rose at first because market prices were being charged and after 1987 because of the huge change in the exchange rate. The numbers of people attending many government hospitals and health centres dwindled rapidly. The small district hospital described in previous research carried out only 30 kilometres from the present study (Orubuloye & Caldwell 1975), had, in 1974, every bed filled and long queues of outpatients. Sixteen years later it was almost deserted and doctors and nurses reported that their potential patients had 'run away' because of the expense that treatment would have meant. They believed that the patients were attempting home cures or had turned to the traditional medical system or to the faith-healing churches. The adherents of these churches increased greatly in the 1980s from a small proportion of the Christian population to perhaps one-third, a change owing more to the uncertainties of the times than to the need for cheaper treatment philosophies.

The control of family resources

In most of sub-Saharan Africa women are major producers, being responsible for the greater part of the labour inputs into farming. In West Africa most women have their own budgets, control resources, and make decisions, including treatment decisions, based on these resources. A great deal of research has been reported on women's role in production, less on their budgets, little on the implications for decision-making, and practically nothing on the implications for treatment decisions.

The separation of spousal incomes has been attributed to inherent tension between husbands and wives, and to wives' efforts to protect themselves by retaining their earnings separately. Yet the separation of incomes may stem more from competition among present or future co-wives. In this situation men can both protect themselves and limit expenditure. They can avoid the appearance of favouritism among wives. In a polygynous marriage this avoidance of the appearance of favouritism can lead them to refuse financial help to wives for everyday expenses and to urge their wives to employ a more co-operative and collective approach to supporting themselves and their children. This, of course, saves the husbands money.

The study of the paramount role of sub-Saharan African women in agriculture has become a major academic industry, partly propelled by the interest of the women's movement. Much of Boserup's (1970) study of *Women's Role in Economic Development* is devoted to it, and subsequent studies (Economic Commission for Africa 1975; Bay 1982; Strobel 1982) amplified and modified that picture. The studies note that this pattern of female cultivation is found in an area characterized by shifting cultivation and hand-held hoe tillage. Clignet (1970:20) claims that female labour is of especial importance, and hence renders polygyny particularly resistant to erosion, in the region where 'root crops' (i.e. tubers) are dominant, the forests of West and Middle Africa. It is instructive that in far southern Africa, displacement of hoe-based shifting cultivation by the plough and commercial livestock raising in Botswana has been associated with the decline not only of polygyny but of marriage itself (Timaeus & Graham 1989:374, 392–393).

Women's role in agriculture has not led directly to separate women's budgets. In West Africa that has also been the product of polygyny, itself related to the value of women's farm work, and of a

powerful lineage system whereby individuals often owe stronger allegiances to their families of origin than to those of marriage. In the West African system of polygyny, usually characterized also by unstable marriage, there is a certain economic logic in the basic budgetary unit being a mother and her children, with each wife being responsible for much of the day-to-day expenses of herself and her children. Paulme (1963) concluded after her edited survey of *Women of Tropical Africa* that women are independent in many ways and closer to their children than to their husbands. Comhaire-Sylvain (1948:159-160) reported of Lagos that the mother 'supplies extras in the way of food or clothes while the father is conspicuous only by his interferences'. Although, at any given time, only around 45 per cent of West African wives are in polygynous marriages (Lesthaeghe, Kaufmann & Meekers 1989:276), most of them will find themselves in such marriages in the course of a lifetime and all must be prepared psychologically and financially for this eventuality. West African women also say that they must have separate budgets because they must have the unconstrained right to meet their obligations to their own lineages. This logic does not extend to East and Southern Africa where, especially in the patrilineal areas, a stronger patriarchy makes unified, male-controlled budgets possible even in polygynous marriages. Munachonga (1988:187–193) reported that, even in urban Zambia, where much of the population is matrilineal, and in a study population in which 58 per cent of wives earned separate income, money was so strictly controlled by husbands that in only five per cent of the households was there any separate expenditure by the wives and this was held against them and caused much suspicion. In contrast to West Africa, a working wife could assist her relatives only with her husband's permission, while he needed no agreement from her to help his relatives. Part of the explanation of the uniqueness of West and Middle Africa is the fact that there are elements of a double lineage system with patrilineal societies exhibiting some matrilineal features and matrilineal societies some patrilineal features. Part, too, in West Africa, is the fact that most trading is done by women and hence they earn substantial incomes from sources other than their husbands' land.

Even in West Africa, female trading has not always been as dominant in the society and economy as it is now, for the market has grown persistently in a society which was once overwhelmingly devoted to subsistence agriculture. Guyer (1980:347-348), in an attempt to recreate the nineteenth century situation in south-central Cameroons, decided that men basically controlled the farming product of their wives through the husbands' lineages' control of land and the rights of husbands in marriage, but that, in a polygynous system, some wives produced more food than others and had a certain claim over the surplus. In a later paper examining the African situation more broadly (Guyer 1981:96-100) she concluded that husbands' rights over their wives had strong contractual elements and that the 'assumption that men necessarily control the labour and incomes of their wives and daughters may ... be incorrect'. In particular, she drew examples from Dupire's (1960) study of the Ivory Coast. In the matrilineal Ashanti society of forest Ghana, Abu (1983:157) wrote of marriage: 'The atmosphere is more that of a contract being concluded than an important stage in the life cycle...'.

Because women often farmed separately and because they had distinct rights to food for themselves and their children, they often had a surplus, sometimes on land to which they had access as daughters or sisters rather than as wives. As the market developed, this often meant that they could dispose of this food by selling it in the form in which it was harvested or in a more processed form produced by pounding, fermenting or cooking. Their own lineage had a strong interest in safeguarding their right to this surplus. There was also some trade in locally produced and dyed textiles as well as ornaments. There was some monetization in West Africa even before the sixteenth century, as is evidenced by the Ashanti gold weights, but the creation of markets on the coast grew most strongly from that century as the European presence increased, with currency at first dominated by the Portuguese-provided cowrie shells which were slowly displaced by coins. Women's trading activities

spread from food to cloth, alcohol and many other manufactures. Women traders have problems which account for the fact that they generally earn less than their husbands. Strobel (1982:119) cites Wachtel (1976) with regard to the constrictions suffered by women traders because they cannot own land either to use as collateral or in which to invest. This position has been somewhat muted in West Africa because the land has not been freehold, but nevertheless the largely male control of land has had a similar effect. Ghanaian women traders solved the problem of investment by buying trucks, known as a result as 'mammy lorries', in order to control much of the country's transport.

Although there has been much less research on how women dispose of their resources than on how they acquire them, some of the researchers' findings on how the women see those resources are particularly pertinent to this article. Saul (1989:177-180) reported of the rural Bobo of Burkina Faso that the women work quite consciously so as to have greater autonomy in decision-making and spending, but that the richer their husbands are, the more likely is this ability to work, with its concomitant economic freedom, to be restricted. Fortes and colleagues had noted in their 1947 Ashanti Survey (Fortes, Steel & Ady 1947:163,168) that spouses earned and spent separately.

> It is taken for granted in Ashanti, as in most parts of West Africa, that a woman will earn her own living or a large part of it. Customary law and the family system guarantee her the free use of self-earned income on the same terms as a man ... Each adult member of the domestic group earns his or her own living ... there is no community of production under the leadership of the family head, as is the case in many peasant societies.

Clark (1989:103) wrote:

> Independent income is an important aspect of personhood in Asante for women and children as well as adult men. Women speak of valuing the ability to make personal decisions about how to spend their money, however little, rather than having to justify their needs to others. The ability to assist kin, contribute to funerals, travel and support children is necessary to become a full social adult in the lineage and the community

Oppong, Okali and Houghton (1975:1) quoted Aidoo (1969: x):

> In Ghanaian society women themselves believe that only two types of their species suffer - the sterile - that is those who are incapable of producing children - and the foolish. And by the foolish they refer to the type of woman who depends solely on her husband for subsistence...

In their study of Ghana they concluded that, although women are deeply involved in the society, wives usually command fewer resources than husbands.

Clark (1989:99) makes one further point about Ashanti society, that there is more pooling of resources for expenditure between mothers and their children, even married adult sons, than between wives and husbands. Everywhere, a description originally made of Uganda probably applies: 'a man who cannot provide for his wife cannot control her' (Taria 1985:113).

Guyer (1988:164–166) found in Cameroon that wives earned about half the money they spent, deriving almost three-quarters of their earnings from the sale of their own agricultural produce while the rest came from trading, food processing for sale, and cocoa labouring. The other half of the money they spent was derived from other people, 77 per cent from husbands, 6 per cent from other men and 17 per cent from other women. That which is given by their husbands is usually earmarked by the men, and such money is frequently specified 'for children's medicine'.

Ekiti nuances

The research reported here was carried out among the Ekiti, a Yoruba people living in the northernmost district of Nigeria's Ondo State, about 300 kilometres by road northeast of Lagos. Most of the

description above is applicable to the Yoruba as a whole and also to their Ekiti subsection. Ekiti's modern history has largely been shaped by external invasion and wars which dominated the nineteenth century, followed by peace, the imposition of British administration and the arrival of missionaries from 1895. From 1906 cocoa-growing brought a change to agriculture, and increasing prosperity.

The point that has to be addressed is the identity of those who do the farmwork in Yorubaland. Boserup (1970:17-23) identified the Yoruba as the only major ethnic group in sub-Saharan Africa among whom men do far more farmwork than women, providing 5-6 times as much of the input. This evidence comes chiefly from two sources: Baumann (1928) and Galletti, Baldwin and Dina (1956). This ratio is modified by the fact that the latter showed that half of all farm work, and a higher proportion still of the harvest labour, is provided by non-Yoruba immigrant male labour from the northeast, hired by both Yoruba men and women. Society seems to have forgotten whether women were freed from farm work because they were such good traders and earned more from marketing than it cost to replace them by immigrant labourers, or whether they were always relatively free of farmwork and found their niche in trading.

The first of these two options seems the most likely, but it is possible that both circumstances were to some degree operative and interacted. Mabogunje (1961:15) cites the evidence of Hugh Clapperton and other nineteenth century travellers that as many Yoruba women as men were trading as early as 1825 on the caravan routes which came southward to Oyo, Ibadan and then Abeokuta and Badagary. But Oguntuyi (1979:140-141) says that modern marketing began in Ekiti only in the 1880s when Ekiti women learnt trading and the selling of prepared foods from refugee Oyo and Egba women, and from being taken as slaves to Ibadan. The process was doubtless accelerated by the opening to the colonial market at the end of the nineteenth century and the growing revenues from coffee in the second decade of the present century which, as had previously happened in Ghana (then the Gold Coast, *cf.* Hill 1963:188-190), allowed the employment of cheap immigrant labour.

Yoruba women clearly distinguish their economic activity and its product from that of their husbands. Afonja (1986:87) reports a study of the rural Ife area which showed that movable family property is identified by wives as belonging to them or their husbands and not to both. It is generally believed that Yoruba women began trading on their own soon after marriage with the initial capital being provided by their husbands (*cf.* Mabogunje 1961:16), but a study of market women by Sudarkasa (1973:118) showed that most women raised the money in other ways, thus making them more autonomous. The process is not unidirectional. The colonial legal changes, aimed at protecting women from male-imposed punishments and from polygyny, accelerated in Ekiti after 1920 when the chiefs accepted native courts and female-initiated divorce (*cf.* Caldwell, Orubuloye & Caldwell 1990:18-23). This led to higher levels of divorce and greater female sexual freedom, and doubtless also assisted the development of highly autonomous marketing and budgeting. Conversely, the fact of such activities led women to join others in tightly organized social clubs (Mabogunje 1961:16) which provided emotional and even financial support for such autonomy.

Yoruba women earn money from both farming and trading. They have access to land through their husbands and rights to some of the product. In addition, because much of West Africa exhibits aspects of a double lineage system, they have some claim on the use of land from their own families of origin (Beier 1955:41). Since the banning of rice imports in 1987, Ekiti women have been putting pressure on their families for such land which they then farm by hiring immigrant labourers.

Flinn and Zuckermann (1981:830), in a study of the sources of Yoruba household income, found in a rainforest village, similar to those in Ekiti, that 70 per cent of households received some farming income and 30 per cent some trading income. The latter figure seems surprisingly low. Afonja (1986:88) reported of the cocoa-growing Ife area that women's incomes were usually well below those

of men, but this contrasts with Sudarkasa's (1973:128) finding in Awe, just outside Oyo and to the north of Ibadan, that women's incomes were at least as high as men's incomes.

There is much less information from anywhere in sub-Saharan Africa on individuals' expenditure patterns. Household survey data usually present figures for total household expenditure which completely obscure the question being investigated here. Among the Yoruba, Flinn and Zuckermann (1981:832) found that about 70 per cent of family income went on food and drink. Sudarkasa (1973:120-128) found that men usually pay for the upkeep of the house, and share the cost of children's education, but the more children being educated, the greater the mother's share. Women buy much of the food for the household, certainly that needed by themselves and their children, and the same situation generally applies to the purchase of their clothing and that of the children, especially the daughters. Sudarkasa summarized the situation (1973: 128): 'neither sex expects the major financial responsibility for the day-to-day upkeep of a woman and her children to devolve upon the husband'. However, he is more likely to meet the occasional major cost. Galletti, Baldwin and Dina (1956:77) found in their 1951-53 survey of Yoruba cocoa farming families that the husband paid for everything in 5 per cent of families, the wife (or wives) contributed money and clothing in 28 per cent, the wife contributed money, clothing and some food in 48 per cent, and the wife fully supported herself and her children in 20 per cent. In the few cases where husbands 'paid for everything', the wives all worked on the husbands' farms and, thus, could be said to have paid their way. As their other contributions to the family rise, their work on the family farm declines. The authors concluded 'wives contribute much more to the family income than the value of their keep' (Galletti et al. :77):. The purchase of food is a significant outlay because about 80 per cent of Yoruba food is now purchased, with money from trading, the sale of cocoa, other non-farming income or even the prior sales of crops.

In a major recent contribution to our knowledge of the household division of income and expenditure, Fapohunda's (1988) study of predominantly Yoruba families in Lagos found that wives and husbands did not pool income or jointly plan expenditures in over three-quarters of all cases, reaching 89 per cent in traditional areas and 79 per cent among the educated, white collar elite, falling to 61 per cent only in an immigrant area with people of very mixed origins (pp.147–153). As measured by expenditure on children's clothing, economic change appears to result in countervailing tendencies: as the husband's education and income rises, he tends to assume a greater part of the expenditure on children, but his share declines as his wife's education and income rise.

Nearly all the above studies do not cover the costs of health treatment. The main reason is that when they were carried out treatment at government hospitals or health centres was free. The implication from the generalizations offered is that mothers would be likely to meet ordinary regular medical costs and fathers the more costly and expensive crises. The research reported here aimed at exploring this new situation. One study of Yoruba health-treatment approaches this question but does not quantify it: 'It is ... well known that Nigerian women are effectively responsible for the care and maintenance of their young children' (Maclean 1976:310–311). The only quantification is found in the recent study of Lagos (Fapohunda 1988:152). Husbands were found to contribute more than half the expenditure on the wife's clothing in only 16.7 per cent of households, but they bore this fraction with regard to children's clothing in 37.1 per cent, with children's school fees in 58.8 per cent, children's medical expenses in 62.5 per cent, and rent in 70.8 per cent. It is interesting to note that rent, usually said to be the one responsibility that is indisputably the husband's, does not greatly exceed health treatment, undoubtedly a measure of the value that Yoruba place on child survival.

It might be assumed too easily that in the grey area of responsibility for bearing costs between husband and wife, everything was a matter of negotiation with each partner aiming to maximize the share borne by the other. However, one reason for Yoruba women marketing is so they can use their

earnings for expenditures they feel to be important and to control decisions they feel to be necessary (Caldwell & Caldwell 1975; *cf.* Caldwell 1982:31–32). The health and survival of children is the prime example of this. Though writing at a time when treatment was less costly, Maclean (1976:310) found that Ibadan men often described their wives as increasingly disobedient, by which they meant that the women sought treatment for their children and themselves without consulting their husbands, while 'formerly, they used always to ask their husbands about such important matters'.

Illness and its treatment

Throughout most of the region diseases fall into two cultural categories, the natural and the supernatural (*cf.* Fosu 1981; Yoder 1981). The natural may be effectively treated by either traditional medicine, usually herbal, or Western medicine, although there are some disorders, such as those of the genitals or which affect reproduction, which are so central to the ancient and dominating concern with maintaining fertility that it is advisable to employ traditional practices. This is also true of most mental and psychological complaints and certain other disorders; as late as the mid-1960s, Maclean (1976:314-5) reported that few people in Ibadan would bother going to hospital for mental illness, epilepsy, jaundice or smallpox. Beyond ailments of this type, Ademuwagun (1976:24) found little relationship among the Yoruba between the kind of illness and the type of healer. He concluded that what counted was the availability of a healer and his acceptability to the patient.

Supernatural diseases may be caused by witchcraft or by the dead ancestors indicating displeasure. In either case it is first necessary to employ a diviner to ascertain the cause and then to adopt his solution. In the case of ancestral displeasure this may involve rituals and behavioural change, while sorcery may be countered by ritual, protective steps or counter-sorcery. Some disorders may be natural or supernatural: Fosu (1981:474) cites gonorrhoea which may just be a contagious disease treatable by modern or traditional doctors, or it may be the product of a spell cast by a jealous husband on a wife's adulterous relationship and consequently requiring divination and such subsequent counter-measures as are recommended. The line between the supernatural and the natural is a matter of judgment and has changed over time with the natural category growing. In Ghana, Fosu (1981:477) showed that, while the illiterate classified only one-third of illness as natural, the proportion increased with schooling, reaching two-thirds among those with upper secondary education. A similar and related transition occurred when coming down the age scale from those in their forties to those in their twenties.

There are three types of healer: traditional practitioners, most commonly herbalists; practitioners of modern medicine; and faith-healing Christian churches. (In addition, the villages are visited by hawkers of medicines, mostly modern pharmaceuticals, who certainly advise which pills to take). Traditional doctors, bereft of a written tradition or codex, do not have an agreed pharmacopoeia or body of knowledge of symptoms, explanations and cures as does Indian Ayurveda or other Asian systems. Buckley (1976:397) reports of the Yoruba: 'Herbalists do not agree about the nature of specific diseases; still less do they agree about the effective cure. They are sceptical, inventive and individualistic'. Herbalists and modern doctors are not in fundamental philosophic conflict with each other (again unlike the situation in Asia); they merely differ sometimes with regard to diagnosis and more commonly with regard to the best medicines. Increasingly, herbalists are willing to accept modern medicine's biological explanations and identification of diseases. In terms of healing theory, and in patients' attitudes, the fundamental divide is between modern medicine and herbalists on the one hand and the faith-healing churches on the other (Maclean 1976:295). The latter have grown enormously in recent years and perhaps half of all Christians (who make up half the national population and nearly all that of Ekiti) have some resort to them. Evangelically they are a powerful force, but their recent strong appeal in terms of treatment appears to owe a good deal to the increasing cost of modern medical treatment. In keeping with traditional medicine around the world, only two per cent of Yoruba herbalists and diviners

are women (Maclean 1976:311), a significantly lower figure than is found among modern doctors or faith-healing preachers. However, many more women than men continued to play the role of traditional birth attendants, not only in the management of pregnancy and childbirth but in the treatment of childhood diseases (Oyeneye & Orubuloye 1984).

The modern health system in rural Nigeria is largely a governmental one, with a health centre or small hospital in the Local Government Area Headquarters, staffed by at least one trained doctor as well as nurses and a compounder. In the nearest large town there is likely to be a larger government hospital as well as a number of private doctors and clinics. Government treatment was, until 1984, free; but outpatient treatment, hospitalization and medicine are now all charged for. There are provisions for remitting charges to the poor but many people are ineligible for these concessions, unaware of them or intimidated by the processes involved.

Maclean (1976:291) described Yoruba treatment decisions in a way that is, now that costs are often prohibitive, even more relevant:

> Illness always produces some degree of uncertainty, both in relation to cause and treatment. There are always choices to be made between treatment and non-treatment, between treatment now and waiting to see what happens, between self-treatment or treatment by one or other medical expert.

She also added (p. 295) that most patients feel the right to shop around without committing themselves to the fundamental concepts of the system, although this was less true with regard to faith-healing. Davis-Roberts (1981) reported of Zaire that patients moved easily between traditional and modern systems identifying the strengths of each.

We know that there were always costs in terms of time and travelling. In northern Nigeria, attendance at clinics falls off with residential distance from the clinic, and is highest in the off-season after harvest and lowest when farm work is most intense (Osuhor 1977:93). In Uganda, polygynous and incomplete households were least likely to bring children to the health services (Bennett, Saxton & Junod 1968:278). We also know that parents do not feel equal obligations to each child in the household, and this may extend to food and medical treatment. This arises from marriage instability and from the partly related fostering of children, for it is often felt that new marriages will be strengthened by fostering out the children of previous marriages. In Yorubaland, as in much of West Africa, around one-quarter of the children of a family have typically been fostered (Page 1989:414–415) and only around one-half of the children under age 15 are living with both biological parents. Clark (1989:99) described the situation in Ghana:

> A child automatically has some economic separation from each parent because of its relation to the other. Both pay individually for children's expenses and gifts. Fathers often give money, clothes and other goods directly to their children, rather than to the mother, so she has little opportunity for redistribution. Half siblings, therefore, may get quite different levels of support.

Finally, what healers do the sick choose? Ademuwagun (1977:899) examined the situation in 1974 in both urban (Ibadan) and rural (Okitipupa) Yorubaland. In the latter he found that 26 per cent of treatment took place in the traditional sector (herbalists, 'spiritualists', *mallams*), 57 per cent in the modern sector (hospital, health centre, dispenser, clinic, maternity, chemists), 5 per cent either traditional or modern (hawkers, herbal stores etc) and 12 per cent was self treatment. If each episode of sickness is identified and followed, self-treatment or home treatment is found to be over 50 per cent in most developing and developed countries (Kleinman 1980).

Part of the explanation for the lower level of home treatment reported in the research described here is that the focus of the research was on 'the utilization of health services' rather than the treatment of illness. Even here, if we include dispensaries, chemists, hawkers and herbal stores as places of purchase for home medication rather than sources of treatment advice, the figure for home treatment reaches 50 per cent.

The research

The research described in this article does not fully cover all the matters raised above although everything already reported is of some significance in interpreting our findings. Furthermore, this research was essentially a pilot study for a larger-scale planned program on health transition (i.e. the cultural, social and behavioural determinants of health). One section of this pilot study began to explore the question of divided spousal budgets and their implications for treatment decisions, and these are the findings reported here.

The research was carried out in a single village containing 147 houses and 1200 inhabitants (the sampling unit being the house with some containing more than one household). The village lies only 40 kilometres northeast of the major urban centre of the district, but, as the last 8 kilometres of the journey to it is on an unsealed branch road, often cut by flood waters in the wet season and without regular public transport, it is quite isolated. The men's traditional occupation has been the farming of such staple foodstuffs as yams, corn (maize), cassava (manioc), cocoyam (taro), beans (cow peas), plantains (the large non-sweet banana) and hill (or dry) rice. For almost three-quarters of a century cocoa has been the major cash crop, although, since the ban on rice imports in 1987, rice has also been grown commercially on a large scale. The village is a typical Yoruba one; in spite of its size it is not a town for it is focused on farming and the people are willing to travel considerable distances to their cocoa trees or shifting cultivations in the cleared bush as the price for living together. The result is that the agricultural population leaves for the farms at daybreak to return after dark in the peak labour season and in mid-afternoon in slacker times (a somewhat inconvenient schedule for the social investigator).

Three years before the research, treated piped water had arrived as part of an intensive Ondo State program, but there is still no electricity. Like most of Ekiti the population is largely Christian - 87 per cent, mostly Baptist because of the founding of a mission station early this century. There is also a small Muslim trading population. The mission station provided a school and probably some familiarity with Western health concepts. In recent years the government built a small maternity and health centre which has given greater substance to that familiarity.

The pilot study was of both males and females, but the data presented here were obtained from females over 15 years of age, interviewed late in the afternoon when they had returned from farming or trading. Co-operation was sought from the villagers, initially through their leaders, but later by winning their goodwill especially by providing transport to the main road. Co-operation was reinforced by the circumstance that no one had ever surveyed or studied them before and they greeted the new experience with enthusiasm. The result was that the survey failed to obtain an interview with only 5 per cent of women listed in the one-in-two sample of houses, and in each case this was because of temporary absence from the village rather than refusal. Supervisory reinterviews confirmed the interviewers' belief that the data from the 111 completed schedules were of high quality. Both survey and open-ended interview approaches were employed. The former are reported quantitatively here but the latter inform the discussion. One of the associated researchers stayed in the village, participating in its activities and observing its healing behaviours.

The population

Table 1 presents a summary of the characteristics of the female respondents. The women are almost entirely Yoruba. Both men and women farmers employ non-Yoruba agricultural labourers, but nearly all are men and most live out on the farms and not in the village. Apart from some Muslim traders, it is an essentially Christian population, the result of Christian conversion this century. With the missions and then the enormous expansion of Ekiti schooling over the last 40 years, most women under 50 years now have some schooling, and most of the younger women some secondary schooling.

Table 1
Characteristics of 111 female respondents over 15 years of age interviewed in the Ekiti Village Study, 1990 (percentage distributions)

	Characteristic	Subgroup	Distribution %
(1)	Ethnicity	Yoruba	99
(2)	Religion	Christian	87
		Muslim	8
		Traditional	3
		No religion	2
(3)	Education	None	41
		Only primary schooling	31
		Beyond primary school	28
(4)	Major occupation	Trading	50
		Farming	18
		Artisanship	12
		Professional semi-professional, managerial, clerical	4
		School student	7
		Other (inc. no occupation and apprenticeship	9
(5)	Husband's occupation	Farming	61
		Trading	4
		Professional, semi-professional, managerial, clerical	18
		Artisanship/semi-skilled	8
		Difficult to categorize	10
		No occupation	7
		No response	1

The occupational figures show that trading is almost entirely in female hands, the exception being some Muslim men. Farming is not so completely a male preserve. Indeed, most women do some farming during the year but even in a largely isolated village only 18 per cent of women regard it as their chief occupation. What is extraordinary is that forest Yoruba villages of this kind can support half of all women and one-quarter of the occupied population in marketing. The explanation is partly that many of these women work for very low returns. Trading is almost as much a way of life as a source of income. The rest of the explanation is that these shifting cultivation forest farmers are not subsistence farmers, for most of the food they grow is sold raw or cooked even if they have to buy from the market later. Their income from farming allows the families to buy gaily coloured cloth, clothing and many other retail goods, many made as far away as China, in the village market from the village women. Even small villages have surprisingly active markets every five days, and many market women describe themselves as 'traders' because they sell in other village markets as well, and go as far as Lagos to buy manufactured goods for resale. Villages even offer 'white collar' employment in nursing, teaching, as church ministers and as government officials. The female artisans are weavers and dyers.

Tables 2 and 3 present demographic data.

The relatively high median age (for all Yoruba women over 15 years of age it is about 39 years) is explained by the outmigration of the young, especially those with schooling, to the towns and cities. Fertility is high and may be rising as the duration of breastfeeding and postpartum sexual abstinence declines, although both are still high by contemporary levels in Yorubaland as a whole. Fertility is so high because women still marry at 17-18 years (again lower than the Yoruba average) and there is virtually no restriction of births by contraception. Child mortality (and, by inference, all mortality) is high at about the same level recorded in another recent rural study (Orubuloye, Caldwell & Caldwell 1990:4) and little below that recorded in the area 16 years earlier (Orubuloye & Caldwell 1975). There is evidence here that the mortality decline, and probably access to treatment, are in trouble. Children are fostered on the massive scale that is typical of much of West Africa, but nowhere else. This means that mothers probably have more specific personal responsibilities to about half the children in the households than to the other half.

Table 2
Demographic characteristics of 111 female respondents

Age:	average age	39 years
Fertility:	average live births of women 45+ years of age	6.5
	total fertility rate	7.9
Factors affecting interbirth interval:	average duration of breastfeeding	20 months
	average duration of postpartum sexual abstinence	24 months
	current use of contraception	1%
	past use of contraception	7%
Mortality:	estimate of life expectancy from child survival	45 years
Fostering of children under 15 years of age:	own children fostered out (average)	2.5
	other children fostered in (average)	2.3
	proportion fostered-in children of all children in household	49%

Table 3
Marriage, female respondents

		%
Married status:	never married	9
	currently married	65
	separated or divorced	5
	widowed	21
Type of marriage ceremony (ever married):	traditional	78
	traditional and other ceremonies	3
	Christian (and sometimes civil)	4
	no ceremonies (free marriage)	15
Type of marriage (currently married):	monogamous	50
	polygynous	50
Spousal age difference (currently married):	monogamous marriages	10 years
	polygynous marriages	16 years

Marriage is still largely traditional and universal, although there is a significant number of free marriages (unions formed without ceremonies) which are said to be increasing. Polygyny is common, which explains the wide age gap between spouses, which in turn explains the high level of widowhood. What is new is the large number of widows of reproductive age who do not remarry, evidence of the decline of levirate remarriage and of family control of marriage.

Independent female earnings: farming and trading

An intensive sub-study was undertaken of the source of women's income. It was confined to the half of the married women who were in polygynous marriages because some of the future research will concentrate on the economics of these more complex households. Nevertheless, the study may not be atypical in that most monogamously married men and women have arranged their activities on the assumption that they may well be polygynously married in the future. This subsample is employed only for the analysis in this section on earnings; all subsequent analysis draws upon the whole sample.

About 60 per cent of these wives do some farming, but half even of this group usually take part only in the planting which is the occasion when there is the greatest need for all to help. Five out of six work only on their husband's land. In spite of the argument that polygynous marriages produce working teams of wives, only two-fifths work together with other wives. Their working partners are much more likely to be their children and two-thirds regularly farm with them. In spite of their farming and their rights to a significant fraction of the food they grow, only one-sixth meet all their food needs and only 30 per cent half or more of their requirements. Only one in ten grow enough food for themselves, their own children and the share of the food they are required to cook for their husbands. Three-quarters regularly buy food from the market and nearly all sell food on the market.

Around 63 per cent of these wives do at least some trading. Clearly, rural Yoruba society is more complex than the simple description of the men farming while the women trade. Only half the traders got their initial capital for trading from their husbands; one-quarter found it themselves, one-eighth were staked by their children, and the rest relied on other relatives. Most of the trade was in foodstuffs, cooked food and textiles, but others sold palm oil, kola nuts, pots, jewellery and a range of manufactures.

Their income estimates were shaky and even suspect but they illustrate the situation. Only one-third of those farming claimed annual incomes from that source of 1,000 Naira (US$110) per year, but three-fifths of the traders made that claim. Indeed, one-fifth said that they earned more than 4,000 Naira (US$440) from trading. Women's average incomes are probably lower than those of the men but their earnings form a significant fraction of that of the whole community.

Female obligations and expenditure

We have established that women have separate incomes and control over its expenditure. However, that control is hardly a question of free choice because most expenditure is dictated by needs and conventional expectations. Expenditure patterns are analysed in Table 4.

This table brings out the important point that wives are less responsible for their own maintenance than for that of their children. One reason is that perhaps half the children are not the husband's or not those of his relatives, and so he feels less obligation toward them. Thus only 31 per cent of women bear the cost of half or more of their own food, but nearly all provide half or more of the children's food. Similarly 69 per cent provide half or more of their clothing costs but 95 per cent do so for the children's costs.

Table 4
Fraction of expenditure borne by wives for various expenditures

Expenditure	All (%)	Most (%)	Half (%)	Less than half (%)
Her household possessions (furniture etc)	23	41	30	6
Her food	3	6	22	69
Her clothing	33	3	33	31
The children's food	35	42	21	2

The children's clothing	82	8	5	5
The children's education	7	5	25	63

The literature names two investment costs borne largely by husbands: the children's education and housing. This was found to be true with regard to schooling. However, in the case of housing, if a woman wants some degree of separation from the other wife, she provides most furniture and possessions beyond the structure itself.

Not all the costs are met by either the wife or the husband. This will become clear in the next section where we examine medical treatment, and may indeed be more the case in that area of expenditure than most.

Case studies of children's most recent sicknesses

There are good reasons for mistrusting the responses to questions about normal or usual behaviour. Accordingly, the research then concentrated on identifying the most recent illnesses, first of a randomly selected dependent child and then of the respondents themselves, in order to be able to record what happened in each specific case.

In the case of the child, only 7 per cent of respondents could not remember any case of sickness or could not provide details. In 11 per cent of interviews the child was currently ill and in another 63 per cent this had been the case within the previous 12 months. As usual in forest Nigeria, the majority of episodes (52 per cent) involved fever and most were believed to be malaria. Childhood infectious diseases and other minor ailments accounted for a further 27 per cent of sickness, skin infections for 11 per cent and diarrhoea for 8 per cent.

Because the emphasis was on treatment and treatment costs, respondents were asked about the place of treatment, which probably led to an understatement of home treatment and perhaps faith healing, although the effect of strong adherence to the Baptist church and the lack of an influential local evangelist should not be underestimated. Only one per cent reported faith healing but 28 per cent reported home treatment. Significantly over two-thirds of this group said that they used traditional methods or medicines, while just under one-third gave modern pharmaceuticals. But 66 per cent took the child to the government dispensary, which offers only outpatient treatment by a nurse and a midwife.

The focus of the investigation was the payment for the treatment. The results are presented in Table 5.

In absolute terms the costs were small, but in terms of the ability of families to pay they were more formidable. The average cost was around 20 Naira (US$2.22) or 2 per cent of the women's annual earnings - or one week's earnings. What was unexpected, and at odds with the previous more generalized information, was that husbands met the costs in at least half of all cases. The rest were met either by the mother or by those she approached, her elder children, parents or siblings.

Table 5
Payment of treatment for last case of illness of selected child

			%
(a)	Cost of treatment in Naira (and US$)	Under 15 (US$1.67)	41
		16-30 (US$1.77-3.33)	41
		31-49 (US$3.44-5.44)	10
		Over 50 (US$5.56)	8
(b)	Person meeting the cost	Father	53
		Mother (respondent)	29
		Both parents sharing	1
		Older siblings	8

Mother's relatives	3
No response	6

Who meets the cost is clearly related to its magnitude as Table 6 demonstrates.

Table 6
Cost of child's treatment by person meeting cost

	Person meeting cost				
Cost (Naira)	Father	Mother	Older siblings	Mother's relatives	All persons
	%	%	%	%	%
Under 15	48	52	–	–	100
16–30	73	19	8	–	100
31+	64	27	–	9	100

Note: One case of joint payment omitted.

On the whole, mothers meet the lower treatment costs. As costs rise, fathers, the children's older siblings and the mother's relatives are called upon.

In fact, as Table 7 shows, the decision for treatment is usually made by the person who pays for the treatment. Indeed, the timing and even the fact of treatment often depend on finding a person willing to make the treatment decision and then pay the cost.

Table 7
The association between paying for children's treatment and deciding upon it (numerical distribution)

Person who paid for treatment	Person who decided on treatment			
	Mother	Father	Mother and father jointly	Others
Mother	***16***	3	2	1
Father	3	***27***	10	–
Others	2	1	1	***5***

Note: Italic numbers indicate that the person who paid also decided upon treatment

Two findings stand out in Table 7. The first is that, although almost one-fifth of the respondents insisted that the treatment decision was taken jointly by husband and wife, only one respondent reported that it was paid for out of a joint budget. The West African spousal separation of budgets remains almost intact. The second point is that in 53 per cent of cases the person paying made the treatment decision; indeed, if we remove the ambiguous joint-decision category, that proportion rises to 62 per cent. There appears to be a real question as to what joint decisions meant; often it appeared to be the case where the mother felt treatment to be needed but could not afford it, with the consequence that she kept on at her husband until he agreed that there should be treatment and he would pay for it. Indeed, the father paid for almost as large a proportion of treatment after decisions of this kind as when he made the decision on his own. These were often severer cases which had resulted in both parents taking the child for treatment. If the mother herself rushes off with a sick child, she must expect to bear the cost, and did so in over three-quarters of all cases where she decided on her own for treatment. In many of the cases where she could not do this, treatment was delayed. Doubtless, there are many cases where treatment delay has proved to be fatal. These delayed cases included a disproportionate number where the cost was unexpectedly high.

This analysis did not distinguish the children being treated by whether they were the biological children of both parents or only one, or indeed, whether they were fostered children. This distinction will be made in the main research project. Bledsoe, Ewbank and Isiugo-Abanihe (1988) showed for Sierra Leone that fostered children, children of questionable legitimacy and children of former unions were at greater risk of treatment delays, often as a result of dispute over who should meet the cost of treatment. The risk can be especially great for fostered children, particularly when their biological parents live far away and the foster parents feel that the biological parents are richer and should bear the cost; then there are delays while messages are sent and treatment may take place only when a parent arrives, money is received or the sick child's condition worsens. It was shown in Sierra Leone that fostered children suffered higher mortality, probably largely the outcome of delayed treatment.

One further caveat should be made. The study was made at a time of the year when money from food and cocoa sales was plentiful. There is a lean time from April to July, from the final period of the dry season into the rains but before any of the new crops can be harvested. It is then that men run out of money and turn to their wives, who are said to be more frugal and whose trading activities are less seasonal, to shoulder a greater proportion of children's medical expenses and other emergency costs. In these circumstances women inevitably assume greater responsibility for deciding when and where treatment will be given.

Case studies of wives' most recent illnesses

We had anticipated substantial differences between reports on the respondents' own sickness and that of their children. In fact, there was little difference: the women's reports were around 2 per cent below those of their children in all categories: failure to remember when sickness last occurred, levels of current illness and illness during the last 12 months. More surprisingly, their pattern of illness by the major categories employed above was astonishingly similar to those reported for the children; even diarrhoea fell only from 8 to 6 per cent. However, their treatment was considerably more expensive. It is true that around 40 per cent of both the children and their mothers suffered from minor ailments where a single treatment costing less than 15 Naira sufficed. But only 18 per cent of children's treatment cost over 30 Naira compared with 38 per cent of their mothers' treatment, while the proportions costing over 50 Naira were 8 per cent and 16 per cent respectively.

The distribution of those paying for treatment was also closer between the experience of the children and that of their mothers than had been anticipated. Their husbands paid for treatment in 45 per cent of occurrences (compared with 53 per cent of child treatment); they paid for their own treatment in 29 per cent of cases (27 per cent for children), while in both cases the women's children paid for 8 per cent of treatments. The difference lay in help by the women's family of origin, which met only 3 per cent of children's treatment but 12 per cent of that of the respondents, still clearly regarding them as the families' daughters. Once again the women were most likely to pay for treatment when the costs were least.

This time, too, our main focus was on the relationship between who paid for treatment and who made the treatment decision, as is shown in Table 8.

Table 8
The association between paying for the treatment of the female respondents and making the treatment decisions (numerical distribution)

Person who paid for treatment	Person who decided on treatment			
	Woman	Husband	Jointly	Others
Woman	***21***	1	–	1

Husband	7	***27***	4	–
Jointly	–	1	–	–
Others	1	–	1	***7***

Note: Italic numbers indicate that the person who paid also decided on the treatment

This time there is a marked difference between children and women. For the treatment of children 53 per cent of those deciding on treatment paid for it, rising to 62 per cent when the joint categories were eliminated. For the women the figure reached 77 per cent and 83 per cent when the joint categories were omitted.

The table brings out more clearly than any of the previous analysis the nature of West African family economies. Only one per cent of payment was made from a joint spousal budget. Only 6 per cent of the treatment decisions about these married women were joint spousal ones. In 30 per cent of the cases where the woman was sick she decided on treatment, usually because she could pay for it, while, in a further 38 per cent of cases, the husband decided on treatment and paid because he was the only person in a financial position to do so. In just under one-quarter of the cases where the wife decided she needed treatment (i.e. 10 per cent of all cases), she got the treatment with the husband meeting the cost.

The future

The best indication of likely future trends is probably provided by the differential pattern of behaviour of the respondents at different levels of education. This certainly includes an income effect but the income figures are too uncertain to separate this out.

The most notable feature of behaviour by educational group is that there is a much greater gap between illiterate women and those with some primary schooling than between those with some schooling and those with substantial schooling. This seems to provide support for the contention that the most significant impact of education on individuals is to have any schooling at all, in that the very attendance at school identifies persons in their own minds with modern institutions including the need to employ modern health services in times of sickness (Caldwell, Reddy & Caldwell 1983:198).

In terms of the type of ailment, illiterate women are more likely to suffer from minor and often poorly specified complaints. This is doubtless a function both of way of life and of a different way of seeing illness.

Educated women are more likely to seek medical treatment for their own illnesses and much more likely to do so for their children. In the latter case, the probability of seeking medical treatment rises continually with education. When home treatment is practised either for themselves or their children, they are more likely to treat the sickness with modern pharmaceuticals.

These contrasts rest on profound differences in the nature and economics of the family. There is a strong association between the education of wives and husbands, and we are really contrasting uneducated families with educated ones. As education rises, we find the perhaps unanticipated result that women are less likely to make the treatment decision for either themselves or their children. In each case the proportion of treatment decisions made by the women declines from around 50 per cent among illiterates to 25 per cent when they have secondary schooling. The explanation is that in the educated families the husband is much more likely to pay and hence he makes the decision. It is less a case of displacing wives who are determined to have medical treatment than of supplementing them. As family education rises, there is a much greater likelihood of employing modern health facilities and this is precisely because there is an increasing probability that the husband and father will meet the cost. Thus the increasing assistance and decision-making by the husband does not usually mean more domination, but just that another largely autonomous individual has entered the field. However, an

educated wife is likely, not only to feel more strongly about treatment, but to put her case more convincingly and to be taken more seriously. When it comes to treatment or other aspects of the modern world, husbands pay little attention to illiterate wives but often put up very little resistance to the arguments of educated ones.

The budgetary change with increasing education in the family is not merely one of a changing balance between the sexes. In illiterate families a quarter of all treatment decisions and payments are made by older children both for their younger siblings and their mothers. This is the traditional economic unit of a polygynous society: the mother and her children. As family education rises, siblings as a source of assistance for treatment (although perhaps not for more expensive contributions such as help for education) nearly disappear. This conversion of the man into the 'breadwinnner' is certainly a type of Westernization, but, at least at present, two other implications do not follow. This is not the product of a trend toward monogamy: there appears to be no such trend and the greater assumption of husbandly responsibility occurs in polygynous as well as monogamous marriages. Nor is it the product of a unification of family budgets: these remained as separate in educated families as in uneducated ones. However, education does make a woman more likely to demand quick treatment for her sick children and her husband more likely to agree and, more important still, to pay for it.

Discussion

The community studied was, in terms of divided spousal earnings and budgets, typical of the situation in West Africa described by the literature. This study shows that those descriptions can also be applied to the payment of treatment costs. The case studies show that men play a greater role than one might infer from the literature, meeting the cost in over half the identified treatments for both their children and their wives. Furthermore, they are even more likely to assist when the cost is greater. The evidence from this village is that men usually do earn more than women, largely because of their control of land, and this intervention is often critically necessary. Husbands' incomes have a greater margin in the study area than in the village reported by Sudarkasa (1973) because it is in a cocoa-growing area. The men control the cocoa production and have done better financially than the women; since the advent of the structural adjustment policy, cocoa exports have earned more Naira as the Nigerian exchange rate has fallen.

Nevertheless, the central finding of the research is that treatment depends on the ability to pay. The great majority of child sickness is probably first identified by the mother (*cf.* on rural India, Caldwell, Reddy & Caldwell 1983:200). In this Ekiti village, and doubtless in West Africa as a whole, she cannot rush a sick child to the hospital in the knowledge that she has a unified family budget behind her over which she has some rights and which will meet the cost. Inevitably, this means delays in treatment and discussions - even haggling - over whether treatment and the consequent expenditure, is necessary. Such delays must have harmful health consequences. In a study of Sri Lanka Caldwell, Gajanayake, Caldwell and Pieris (1989) came to the conclusion that the extraordinarily low mortality levels of that country, especially infant and child mortality, owed much to the rapidity with which medical assistance was obtained once illness was suspected. If this is correct, then the divided budgets and treatment decision-making responsibilities of West Africa may be a significant determinant of continued high mortality, especially in an era of economic structural adjustment programs. Indeed, an awareness of the West African budgetary situation should make those advocating or introducing structural adjustment programs cautious about extending the 'user pays' principle to the health sector.

If, however, fees are charged, ways must be sought for ensuring that they are not a cause of delay in seeking treatment. A reduced rate for the needy or penurious, as is the case in Nigeria, is certainly one approach, but many of the most needy may remain unaware of such concessions, and health centres may be reluctant to give them too much publicity because of the potential impact on revenue.

Furthermore, some of the mothers delaying treatment for children until their husbands agree to meet the cost may have husbands who are known not to be impecunious.

One approach in the latter case would be for health centres to offer family accounts where treatment costs would be charged and where an accounts section, distinct from the medical section, would subsequently attempt to collect payment from both husband and wife. Indeed, in the spirit of the Alma Ata Declaration and primary health care, the community or its organs could play a central role in collecting these debts.

A research agenda

This research was conceived as a pilot study to guide a major program. As such its failings were as important as its successes. The following additional stresses are clearly needed in a larger program.

We need to know much more about the structure of the family - which children are the biological offspring of both parents and which of only one? Does responsibility for treatment decisions and payment change accordingly? What about foster children? Is the situation affected by whether they are close relatives or not? In terms of the husband's payment for the treatment of wives, does the situation differ between monogamous and polygynous marriages or senior and junior wives? Specific case studies, on a considerable scale, will be required.

The larger studies must be careful to study all illnesses and the sequence from first detecting, through home treatments to subsequent treatments. Who first wanted treatment? Why? Was there any delay? Why? To what extent did the delay stem from the likely cost? What was the preferred first treatment and what was the actual first treatment? Was any difference dictated by cost? What success was achieved with the first treatment? Were there subsequent different types of treatment and why? These studies must take full cognizance of traditional healers and faith-healing churches and must determine to what extent they are employed to save expenditure rather than because of healing preference.

Finally, the retrospective studies should be concerned not merely with illness but with mortality. There must be detailed case studies of the history of illnesses leading to death, pinpointing delays or the employment of inappropriate healers and the relation of these circumstances to cost problems and to the identity of treatment decision-makers.

Some of this research will need in-depth studies of cases of illness and death and anthropological research in the community before survey methods can be employed.

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