couragement; to Lise Johnson and Sarah Aronson for creative research assistance and development of the vocalization categories; to Mark Hosley for neurophysiological references; to the anonymous reviewers for their thoughtful commentary; and to the staff and parents of the Special Care Nursery for their good will and continuing help in these studies.

[2] Sources included Hinde and Spencer-Booth's (1968) study of mother-infant interaction in captive group-living rhesus monkeys, and Hinde and Davis' (1972) study of changes in mother-infant relationships after separation. Most directly applicable was the work of Richards and Bernal (Dunn) (1972) with human children in natural settings. Observational methods and behavioral categories were developed in a natural history methodology as described by Blurton Jones (1974:10–14).

[3] Social and sensory environment studies: Social and Sensory Environment of Very Low Birthweight Infants (1978), N = 10 (900–1500 g). Auditory Environment Study (1979), N = 9 (1,000–1,500 g). Consecutive Day Study (1979), N = 3 (1,000–1,500 g). Intrusive Interaction Analysis (1981), N = 6 (1,000–1,500 g). Vocalization Study (1984), N = 6 (1,000–1,750 g).

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Illegal Abortion in Southern Ghana: Methods, Motives and Consequences

by Wolf Bleek and Nimrod K. Asante-Darko

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This paper provides information on various aspects of illegally induced abortion among the Akan in southern Ghana. Discussed are the frequency of abortion, the techniques, the social circumstances in which it takes place, its medical, juridical and educational consequences, and value judgements about it. The most important conclusion is that the restrictiveness of the Ghanaian legislation has not been able to prevent or limit the incidence of abortion. Its outlawing has rather led to the use of dubious and highly dangerous means of causing abortion. Young women are the main victims of the present situation, both in terms of unequal educational opportunities and in terms of physical damage caused to them. A more appropriate family planning policy in combination with a legalization of abortion seems a reasonable solution.

Key words: abortion, Ghana

Induced abortion[1] on social grounds is still illegal in many parts of the so-called Third World. Restrictive abortion laws introduced by Western powers in their colonies often remained in force long after they were abolished in the countries that had established them. Both poverty and the illegality of abortion have created the conditions in which abortion is now being practiced in these countries. The people reported on in this study are from southern Ghana, most of whom belong to the Akan.[2] Previous research suggests that, although illegal, abortion is widely practiced. No less than 79 different abortion methods are listed (see Appendix 1). The most important motives for abortion are the wish to prevent the birth of a premarital or extramarital child, the desire to complete education, and birth spacing. Juridical consequences of an illegal abortion are rare. A successful abortion enhances a woman's chance to continue her education, but abortions may result in serious medical complications. Value statements on abortion are ambivalent.

Family Planning in Ghana

In 1967 Ghana was the first African country south of the Sahara to sign the "World Leaders Declaration on Population." The year 1967 was no coincidence, as this followed the removal of Nkrumah who strongly rejected the idea of reducing Ghana's population growth. The National Liberation Council which succeeded Nkrumah was much more oriented to the Western countries and the neo-Malthusian ideas which then dominated their population policy. In the above-mentioned Declaration, population growth was considered an important barrier to economic growth. Voluntary birth limitation, therefore, had to be encouraged. In 1969 an official government declaration introduced family planning to the Ghanaian public (Government of Ghana 1969). It should be noted, however, that long before that time the Planned Parenthood Association, a non-governmental organization, and some church groups had been active in the field of family planning. After the official launching of the national program in 1969, the Ghana National Family Planning Programme, the Planned Parenthood Association and the Christian Council of Ghana became the most important promoters of family planning (Armar and David 1977). At the University of Ghana several teaching programs were set up to train people in family planning related subjects and a large number of research projects were started to prepare the ground for family planning or to evaluate its effects (Bingen 1972). The most ambitious project, which included both family planning and health care delivery, was the Danfa Project (1979).[3] All these projects and campaigns were possible due to substantial foreign aid (Bingen 1972; David and Armar 1978). As is well known, aid for family planning was, and still is, one of the easiest forms of aid developing countries can get. An explanation for this has been spelled out in a large number of publications, which suggest that many policy makers in capitalist donor countries perceive the limitation of population growth in developing countries as advantageous (see Bondestam and Bergström 1980).

The way in which family planning is promoted reflects its foreign basis. Eurocentric and viricentric biases dominate the programs. The impression is given that the target population exists in nuclear families with fathers as breadwinners. The fact that in Ghana, especially in rural Ghana, the nuclear family is the exception rather than the rule, is hardly taken into account. Family planning is encouraged by the government and by foreign-based organizations which deem it desireable for a variety of reasons. The wishes and needs of the people, particularly the women, are hardly investigated, let alone listened to. The result of this approach is quite ironical: the group of people to whom family planning organizations address themselves in the first place because they have the highest fertility, namely, rural married woman, show little or no interest. For these women having children is the main reason for being married, and limiting their children appears to them a contradiction. Another group of women, however, unmarried youngsters, who do have keen interest in prevention of pregnancy, are largely neglected by family planning organizers (Bleek 1976a, 1977, 1981a). As a result, young women who are involved in premarital sexual relationships often fail to prevent pregnancies and consequently attempt to terminate the pregnancy by abortion.

Evaluation statistics shows that about 2.5% of the fertile female population had accepted family planning by 1972, but the majority of the "acceptors" were to be found in the urban areas (Armar and David 1977). We have put "acceptors" in quotes because it is unclear to what extent women who presented themselves at a family planning service practiced family planning consistently. In 1976 research in two rural districts in southern Ghana showed that family planning had been "accepted" by one to two percent of the women of reproductive age (De Kadt and Segall 1981:429). One of us (Bleek 1976a:209), in his study of a rural town, found that the official family planning services played virtually no role in providing contraceptives to members of that community. The few contraceptives which were being used, foams and condoms, had been obtained from commercial outlets and were used on an irregular basis.

Family planning is seen by many as a demographic issue which must be investigated according to demographic traditions. This means that the quantitative aspects are the focus of attention. It is, however, forgotten that family planning is a delicate issue, tied up with feelings of shame and honor. Obviously such delicate issues cannot be approached by closed-end questionnaire interviews. As a result, demographers writing about Africa report figures and statistics the meaning of which is often hardly understood. Too little is known about marriage and family life, sexuality, attitudes towards pregnancy and having children, and motivations pro and contra family planning, to be able to interpret the statistical data in a satisfactory way. Seddon (1972) has pointed out that social anthropologists are better qualified to explore the relationship between demographics, culture and society, because they tend to have a long and comparatively intimate relationship with the people they study, and some of their main concerns are phenomena like birth and death, marriage and sex.

These remarks apply particularly to one type of birth control, induced abortion. Research on abortion in Ghana is fraught with problems for several reasons. Its practice is not only considered shameful, it is also illegal and, therefore, carried out in secrecy. There are no written records which tell us how frequently abortion occurs. Most abortions carried out in hospitals do not appear in the annual reports because they are illegal and punishable. Moreover, most abortions occur outside the hospital. Thus, even if hospital reports gave accurate statistics on abortion, they would inform us about only a fraction of the total number of abortions in the country. In addition, people find it very difficult to talk about abortion. It is to be expected that during interviews people try to avoid the topic as much as possible. Caldwell (1968:161), who in 1962–1963 conducted research among the Ghanaian elite, decided at the last moment to cancel most questions on abortion because he feared that they would jeopardize the entire research project. The government had just imposed the death penalty as maximum punishment for abortion and it was unlikely that informants would be willing to admit having been involved with it. In 1969 the maximum punishment was reduced to ten years' imprisonment, but this did not take away the clandestine character of abortion (for a discussion of the legal aspects see Le Poole-Griffiths 1973). More recent authors on family planning in Ghana rarely have information on abortion. Gaisie and David (1974), for example, present a quantitative analysis and prediction of fertility reduction in Ghana without saying anything about abortion, although it is clear that abortion accounts for a substantial part of prevented births.

To make matters still more complex, in certain circumstances people are the opposite of reticent with regard to abortion. Because of its shameful character, informants may delight in tarnishing their enemies by accusing them of abortion. Finally, for similar reasons, abortion can be a topic for gossip and tall stories. In that case the researcher has the problem of too much information which may be even thornier than too little. According to Snow (1976), this problem applies to Devereux's (1955) well-known study on abortion in "primitive" societies. Snow proposes that the ethnographic data in the book should be read as if it were a novel by Graham Greene!

There are mainly three populations which can be approached for research on illegal abortion. One is the population admitted to a hospital for complications following an abortion (see Ampofo 1971; Kamheang et al. 1981; Okojie 1976; Omu 1981). A major problem with this type of research is that these women constitute an extremely skewed sample of all women obtaining an abortion. Another problem is that it often cannot be ascertained whether the abortion has been induced or spontaneous. A second type of population which can be chosen for research is women, and possibly also men, outside the hospital (see Bleek 1976a; Flavier and Chen 1980; Onwuazor 1977; Sarker 1981). They can be interviewed on their experiences with abortion. The interview can be questionnaire-like or intensive and more personal. Some relevant information is likely to be held back, particularly if illegal abortion is an incriminating or shameful topic, and the interview approach is inappropriate (Bleek 1979). The third type of population which can provide information on illegal abortion are the abortionists themselves, but in most cases they will not divulge anything that might endanger their position or practice. A remarkable exception are the 81 illegal Thai abortionists studied by Narkavonnakit (1979) (see also Gallen 1982; Islam 1982). Their cooperation can partly be explained by the fact that abortion, although illegal, was more or less socially accepted and tolerated by the police.

We now wish to present briefly four studies of abortion in Ghana on which most of this article is based. In 1973 one of us, Bleek, did anthropological research in a rural town in the Kwahu area of southern Ghana. The research was about sexual relationships and birth control and much attention was given to opinions about abortion and its actual practice. The research focussed on one matrilineage, with whom the author stayed during one year. Forty-two adolescents and adults in this lineage were observed and interviewed. In addition, 100 men and 179 women in the same town were interviewed with questionnaires. Most respondents in all three samples were at least part-time peasants, but various other occupations were represented as well, for example, traders, seamstresses, teachers, agricultural laborers, and prostitutes. Many youngsters were still attending school. A comparison (Bleek 1979) between the data acquired by participant observation and the questionnaire data showed, however, that the latter were very unreliable. Bleek used two more techniques in his abortion research. He had 207 school pupils write an essay about personal sexual experiences. Of these, 23 described their experiences with abortion. Finally, he had 188 school pupils complete sentences about the practice of abortion. The advantage of sentence completion is that the respondent has the greatest freedom possible to write down spontaneous associations on the topic of abortion. The results of this research have been published in a thesis and a number of articles (Bleek 1976a:210–25, 1978, 1981b).

In 1978 the other author, Asante-Darko, did a follow-up of Bleek's research. The main purpose was to update Bleek's data by collecting more recent information and to investigate more specifically the consequences of undesired pregnancy for the education of female school pupils. He mailed 206 questionnaires to middle schools in the districts of Mpraeso and Wenchi and to secondary schools in the Eastern Region

and in Brong Ahafo. Only 98 of the 206 questionnaires were returned. As it was expected that the responses to the mailed questionnaire would have limited value, 55 personal interviews were held on abortion cases, mostly involving school-age young women. In most cases the interviewee was not personally involved in the abortion. This had the advantage that questions were not often evaded, but the disadvantage was, as has been explained before, that the informant was inclined to exaggeration.

Both of the above studies were carried out in the community where the abortions took place. The other two studies discussed below were carried out in a hospital, which is where abortion cases end up if they develop medical complications. The implication is that abortion cases found in hospitals are a biased selection of the total number of abortions.

In 1969 Ampofo (1971), a gynecologist at the university hospital of Accra, interviewed 330 female patients who had been admitted because of an abortion, spontaneous or induced. Twenty-five percent of them said that the abortion had been induced, but Ampofo believed that the real number was much higher. Ampofo's data provide important information on abortion techniques, motivations, and medical consequences. The research does not allow for a comparison with abortion cases not admitted to the hospital. In contrast to the other three studies, a large proportion of Ampofo's sample was probably made up of non-Akan.

In 1976 E. Bollen, a Dutch medical doctor, did some research in the Nkawkaw Hospital, not far from the location of Bleek's research. He interviewed 24 female patients who had been admitted after having induced an abortion. The methodological problems are the same as in Ampofo's research.

Frequency of Abortion

Exact figures on abortion frequency in Ghana are impossible to give. For an estimate of its frequency among the Akan in southern Ghana, Bleek's data on the matrilineage may be of some use. Of course, data from such a small group of people (42 in number) cannot simply be extrapolated to the entire Akan population. However, the situation of this particular matrilineage may be similar to the situation of other matrilineages. Admittedly, this is a very vague and impressionistic statement, but it is considerably more specific than, for example, Caldwell's remark (1968:162) that 35% of his female and 45% of his male respondents were of the opinion that abortion in Ghana occurs frequently. In any case, the lineage data are much more reliable than the questionnaire data collected during the same research. As was to be expected, women interviewed with a questionnaire reported a very low frequency of abortion (only 4% of them admitted having been involved in an abortion). In the lineage, more than half the women said they had induced an abortion at least once, and about 15% of the pregnancies occurring in the lineage had been terminated by an abortion. If the lineage data are indicative for Akan society in general it would mean that about half of all Akan women induce an abortion at least once in their lifetime. This frequency is much higher than is usually assumed.

Abortion Techniques

Bleek's research revealed that young people in particular had an enormous knowledge of abortion techniques. Informants reported to him 53 different methods, which can be divided in three categories: modern methods, indigenous herbs, and miscellaneous (see Appendix I).

Dilation and curettage, which is the only safe "modern" method, is reserved for those who have the means to pay for it and the social connections to approach a medical doctor who is willing to perform the (illegal) abortion. The majority of women seeking an abortion must look for help closer by, in social and in financial terms. The nearest method is the use of modern pharmaceuticals which are for sale in local drugstores or pharmacies in the bigger towns. Some of them do indeed have an abortive effect, as they produce uterine contractions—for example, Mensicol capsules, Dr. Bongeans Pills, and Ergometrine. The working of others is, however, extremely doubtful. Alophen, which at the time of Bleek's research was very popular, both as a contraceptive and as an abortifacient, is a purgative containing phenolphthalein. Apiol, according to Martindale (1978), can be used as an emmenagogue, but is of doubtful therapeutic value and has severe toxic effects. Neither is known to have abortive effects, but an anonymous reader of this paper remarked that laxatives produce strong peristaltic movement which in turn stimulate uterine contractions. An overdose of certain medicines such as analgesics and antimalarials may have an abortive working as a secondary effect. If self-medication does not succeed, people may resort to the services of abortionists such as medical auxiliaries and self-made "dispensers" who are more easily approached than medical doctors. The exact manner of instrumentation carried out by these abortionists could not be ascertained from the informants' reports.

Indigenous herbs constitute the largest group of abortifacients. Some names are reported in the local language, Twi, and some in English. Where possible the Latin names have been added. The numbers refer to their position in Appendix I.

These local plants are applied in many different ways. Two of them (15 and 16) are used in a mechanical way: a twig is inserted into the uterus. According to Ampofo the action is partly mechanical and partly chemical. The twig "contains sap which is mildly corrosive . . . . When it is inserted into the uterus the sap causes local chemical reaction in the cervix which may start the bleeding from the uterus. In addition to this, the stick can cause damage to the conceptus and the combined effect causes abortion" (Ampofo 1971:93).

In the use of some plants the leaves are ground, mixed with other herbs or ingredients, and applied as an enema (examples are 15, 18, 19, 23, 24 and 39). With other plants the leaves are prepared as a drink after grinding and mixing them with other ingredients such as sugar, alcohol and other herbs (examples are 19, 20, 21, 23, 26, 27, 29, 30). Some plants are used as a chewing stick (32, 33, 40); with other plants the fruits are used (20, 30, 32, 41) or the roots (19, 23, 28, 29, 38) which are prepared as a drink or as an enema. The use of twigs (15, 16) and the consumption of *Ogyamma* (26) leaves are believed to be dangerous. A more detailed description of the use of these herbs has been given elsewhere (Bleek 1976a:212–215, 1978:114–116).

Various other techniques were reported as well (see Appendix I). They include, among other things, the consumption of sweet substances. It is generally believed that these can cause abortion. Women attempting an abortion may take anything with an excess of sugar added. It is also believed that intoxication and exhaustion are conditions conducive to abortion. Exhaustion can be achieved by beating and strong sexual intercourse. Some of the ingredients are prepared for drinking (43, 44, 46, 47, 48, 49, 50, 51, 52), others for an enema (45). It should be noted that many of the ingredients are mixed. A more detailed description of their use can again be found in the original publications (Bleek 1976a:212–215; 1978:114–116).

Some of the methods listed above and some additional ones are mentioned by Kumekpor and Kumekpor (1977) in an unpublished paper. They sum up a number of herbs and other ingredients which are prohibited to pregnant women because of their potential abortive effects. It is believed that women who desire an abortion will purposely take the prohibited ingredients. The list is quoted in full below:

(1) The infusion of leaves of certain plants (guava, lemon, mahogany, etc.).
(2) The infusion of tobacco and tobacco-based products.
(3) The consumption of very sweet things, e.g., sugar cane, strong solution of sugar, very strong and sweet coffee, very "hot" *kokonte* (food from dried cassave powder), alcohol, especially the locally brewed gin, strong guinea pepper in food.
(4) The use of strong purgatives or laxatives.
(5) Certain strenuous activities such as difficult and vigorous dancing.

Abortion techniques mentioned during the hospital interviews are mostly dangerous ones which may produce medical complications. The most frequent method reported by the hospital patients was the insertion of a twig. Ampofo (1971: 93) mentions still another plant which is used for its twig, the *Commelina*. The use of the twig is very dangerous. Common complications are perforation of the uterus, haemorrhage, sepsis and tetanus. Another technique observed by Ampofo is the herbal pessary which usually contains caustic salts, e.g., potassium chlorate in high concentration. The author thinks it doubtful that such pessaries can produce an abortion, but they can cause ulceration in the lower genital tract. Bleeding from the ulceration may stimulate abortion (Ampofo 1971:94). Most oral abortifacients mentioned by Ampofo are also mentioned by Bleek, with the exception of castor oil and large doses of salicylates. Ampofo believes that most oral abortifacients cannot cause abortion. He has the impression that his patients had taken them as a first attempt and had then resorted to more drastic methods such as instrumentation, either by an unqualified abortionist or by themselves, with a twig. As they thought instrumentation to be incriminating they mentioned only the harmless first methods in the interview (Ampofo 1971:93).

A few abortifacients which are not in Bleek's list are mentioned by other authors. Both Asante-Darko and Bollen mention "Black Power" pills (Potassium Permanganate).[4] Some other herbal abortifacients are mentioned by Warren (1974: 42, 84–85, 373), Tiberni (1980), and Mensah-Agbokpor (1973–1974). All of them are listed in Appendix I; see also Appendix II).

It is significant that many abortion techniques are applied by the pregnant woman herself or by an acquaintance. There are also abortionists, who in daily life are medical auxiliaries, drug traders and others who call themselves "dispensers," and ordinary laymen such as farmers and teachers. Abortionists are regarded as experts, but much of their "expertise" is also common knowledge and is exchanged in communication between friends and turned into self-medication. Clearly, pregnant women who seek an abortion prefer self-help with the involvement of as few people as possible. Out of 29 abortion cases studied by Bleek, at least 14 had been performed by the woman herself or by a close acquaintance. Bollen found that 7 out of 24 abortions had been carried out by the woman herself and three by a partner or friend. In the 55 abortions reported by Asante-Darko, 18 were cases of self-help.

Among Western-trained medical doctors there is much doubt about the efficacy of most abortion methods. They are convinced that a well-settled fetus cannot be removed by, for example, the consumption of herbal concoctions or by application of an enema. The only methods which they believe can be effective are those which involve direct instrumentation of the fetus. It should be noted, however, that the properties of indigenous herbs are unknown to most medical doctors.

But supposing that medical doctors are right, how can we account for the abortions which are alleged to have been caused by these ineffective means? Ampofo, as we have seen, suggests that harmless techniques are pretended to conceal the genuine techniques. Another possible explanation would be that in a number of cases there has never been a pregnancy but only a delayed menstruation. The latter view would explain why people continue to believe in the efficacy of methods which may not be effective at all. The arrival of the (delayed) menstruation would then be considered as proof that the method is effective. As Bleek has explained elsewhere (1978:117), however, certain abortion cases which look implausible to medical doctors cannot be disregarded as delayed menstruation. Obviously, solid research into the properties of indigenous herbs is urgently needed.

Social Circumstances

There are three factors which present themselves frequently in the abortion cases which were studied. The most common one is the factor of education. The desire to complete one's education appears to wield considerable influence on the decision to undergo an abortion. The interruption of a girl's education usually has the consequence that she goes to live in her home town or village and becomes a farmer and/or a petty trader, which is exactly what most girls try to escape by pursuing an education. Most young people in Ghana aspire to attractive jobs in un urban environment, or even abroad. About two-thirds of them leave their place of birth after completing school. A pregnancy during the period of school education, therefore, is extremely unwelcome and abortion may provide a way out in such a predicament.

Ironically, it is precisely the school which promotes the phenomenon of precocious pregnancy. The school is the place where both sexes meet outside the control of parents and relatives, while the control exercised by teachers proves to

TABLE 1. MARITAL STATUS AND AGE OF LINEAGE MEMBERS INVOLVED IN AN ABORTION CASE, AT THE TIME OF THE ABORTION

Age:	−24	%	25–39	%	Total	%
Legal marriage	—		3	(27)	3	(12)
"Free marriage"*	1	(7)	3	(27)	4	(15)
Secret lover relationship	14	(93)	5	(45)	19	(73)
Total	15	(100)	11	(100)	26	(100)**

* "Free marriage" is a socially accepted but not legally ratified sexual relationship.

** Included are two cases in which the abortion was procured without the knowledge of the (male) informant; excluded are three cases about which sufficient information was lacking.

be rather ambiguous. Sexual relationships between pupils or between pupils and teaching personnel are common and often carry some kind of social obligation. Relationships between pupils are tied up with social prestige, those between pupils and teachers tend to have a *do-ut-des* character. Teachers are desirable partners for pupils because of their social status and financial position. Some of them use their power position as a teacher to demand sexual services. Bleek (1976a:52–56) discusses this problem elsewhere. Out of 25 abortions observed in one lineage he found five cases involving a teacher who had made a female pupil pregnant. Other authors pointing at the sexual connotation of the teacher role in the rural areas of Southern Ghana are Roberts (1975) and Bukh (1979: 90).

The costs of having a baby while at school usually involve the end of one's education. The costs of having an abortion cannot be foreseen; the woman may be lucky or unlucky. The risks, however, are well known. The fact that the risks are taken, including the risk of death, shows how strongly motivated these young women are. If the abortion is successful and remains secret the woman can continue her education without any problem. If one of the two conditions is not fulfilled her education and her whole future career are in jeopardy. Akuffo (n.d.) and Bleek (1981a) confirm that in Ghana early pregnancies constitute formidable obstacles to equal educational opportunities for women, not only because women are effectively sent from school because of a pregnancy (Bukh 1979:90),[5] but also because parents and relatives who are responsible for them anticipate that one day they will be forced to leave school because of pregnancy (Akuffo n.d.). They judge that it would not be wise to invest money in such an uncertain enterprise, and keep their female lineage members from school.

In 29 abortion cases Bleek found 8 cases involving a schoolgirl (4 cases lacked information on this point). Ampofo (1971:94) reports that exactly half of his 88 informants gave "desire to complete school or training" as their reason for procuring an abortion. Bollen reports this motive in only 3 of the 24 patients he interviewed. Asante-Darko focussed his interviews on cases involving school pupils. It is therefore not surprising that a large majority apeared to have induced the abortion in order to complete school. In conclusion, education plays a crucial role both in bringing about unwanted pregnancies and in the motives leading up to abortion, but there are also other circumstances.

Another important factor encouraging abortion is the extramarital or premarital character of a pregnancy. The reason is not that the child who will be born will be illegitimate. Illegitimacy does not exist traditionally, because among the matrilineal Akan a child belongs to the mother's lineage, whether or not it has been born within marriage. Illegitimacy, therefore, is "biologically impossible"; no child is born without a mother. Nevertheless, pregnancies outside marriage are often considered undesirable. The reasons are somewhat contradictory.

On the one hand, women have low expectations of marriage. They know that their husband is likely to provide but little for the upkeep of the family. Divorce is frequent and in half of the cases it is initiated by women. Family life often has a matrifocal character and nearly every married woman is economically independent. On the other hand, it is also true that young women may have high expectations, against their better judgement, and hope for a partner who is different from the others, someone who has a sound economic position and who will be able and willing to contribute substantially to the upkeep of his wife and children. The chances of finding such a husband decrease when the woman has a child and is not well educated. It is sometimes argued that a premarital child makes a woman more attractive as a partner because she has proved to be fertile, but the opposite seems to hold nowadays; the presence of a child weakens a woman's "bargaining position." Moreover, a woman's lineage is not always prepared to look after the child although traditional norms suggest that the woman may expect this. Finally, it should be noted that many pregnancies are undesired precisely because they are the result of a secret love relationship which needs to be kept secret. This secrecy can only be maintained if the pregnancy is ended. The lover relationship can be between a married man and a young woman, or between two young people. Lover relationships involving a married woman seem to be much less common or are kept extremely secret. In all cases, lovers have to end a pregnancy if they want to continue the relationship. It is therefore no surprise that abortion appears to occur most frequently among young unmarried people. Table 1 summarizes the information on abortion cases in the matrilineage studied by Bleek. It concerns both female and male lineage members.

The three other researchers found similar data. In Ampofo's sample (1971:89) 60% of the interviewees were unmarried; in Bollen's sample two-thirds; and in a (selected) group Asante-Darko found only 2 out of 55 were legally married.

The conclusion seems justified that the decision to seek an abortion is linked to the premarital or extramarital character of the pregnancy. Moreover, being unmarried often coincides with being at school. The abortion decision is likely to rise from a complex of reasons.

A situation *within* marriage which may lead to abortion is a rapid succession of pregnancies. People prefer an interval of about three years between the births of their children (Bleek 1976b). This preference probably derives from the difficulty of looking after two small children simultaneously. It is generally believed that when two children follow one another at a short interval the eldest may die. Moreover, a woman having children quickly in succession is ridiculed and compared to certain animals with a high fertility (Kumekpor and Kumekpor 1977:9). Abortion can prevent this situation. Abortion to limit the total number of children also occurs, but seems to be less common.

Consequences

In this section we shall discuss three kinds of consequences following abortion: medical, juridical and educational. With regard to the medical consequences, there is a general feeling in Ghana that many young women fall sick, become sterile or even die as a result of abortion (cf. Pellow 1977:174). Exact figures of medical complications are, however, not available. Viel (1982), summarizing some studies in Latin America, quotes a survey that in Columbia and Chile about one out of three abortions results in medical complications. Tietze (1979:84) estimates that about one out of a hundred illegal abortions results in the death of the woman, if the abortion is performed by a non-professional under unsanitary and other unfavorable conditions. We know of a number of abortion cases ending in death, but are not able to present a reliable estimate as to how frequent such cases are. Bleek, who studied 29 reported abortion cases in one lineage, found no case among them which ended in death, but at least seven of them resulted in quite serious complications necessitating admission to a hospital, policlinic treatment or other medical help. In a study of unwanted pregnancies among school girls in rural western Ghana, Van den Borne (1981) found that abortions had caused the deaths of seven schoolgirls between October 1978 and August 1979. Among 55 abortion cases reported to Asante-Darko, 25 were brought to the hospital and no less than ten resulted in death. It should, however, be taken into account that these interviews were often concerned with the more dramatic cases and no doubt they paint an exaggerated picture of the medical problems. The two hospital studies show the most common complications of illegal abortion. Ampofo (1971:84) recorded them in order of importance: severe hemorrhage, sepsis, tetanus and uterine perforation. Out of nine women who died from abortions in the Accra hospital in 1969, five died from tetanus.

Juridical consequences are quite rare. The reason is that all parties involved prefer to avoid the police because of their perceived inefficiency and corruption. It is not unlikely that all parties end up paying bribes to the police and that the case itself is hushed up. Only the police gain from such procedures. Another reason is that people protect the abortionists because they may need their services again in the future, however dangerous these services may be. Even when an abortion is brought to court, the case does not often lead to a conviction (Le Poole-Griffiths 1973:106).

Bleek (1976a:107) found that no abortion had been reported at the local police station in the six months preceding his research. A case of a young woman who died after an attempted abortion never reached the police station although the whole town was buzzing with rumours about the case. The six abortionists whom Bleek got to know in the town where he did his research could carry on with their work without being disturbed. Abortion is busily discussed "behind closed doors" in family gatherings and in the usual gossip, but the police are kept out as much as possible.

The law, however, is very restrictive regarding abortion. Abortion is permitted only on medical grounds and must then be carried out by a qualified medical doctor. Social grounds, which apply to most abortions occurring in Ghana, are not accepted. Officially, therefore, inducing an abortion for non-medical reasons is punishable with a maximum of ten years' imprisonment, or with a fine, or with both (Le Poole-Griffiths 1973). Appeals for a liberalization of the abortion laws in Ghana have not yet met with success.[6]

The educational consequences of an abortion are usually favorable, provided the abortion is successful and does not become publicly known. Asante-Darko found that in 27 out of 32 successful abortions the women continued her education. Eleven of these women had medical complications which made a hospital visit necessary. This fact suggests that some publicity endangers the continuation of education. Sometimes it is possible to resume school in another place where the abortion has not become known. In five cases the woman terminated her education in spite of a successful abortion. The main reason for such a decision is usually shame after the publicity given to the case. In some cases the parents did not allow their daughter to resume school.

An important question is what happens with pregnant schoolgirls if they do not procure an abortion. Are they allowed to stay at school while pregnant and/or do they return to school after the delivery? There is no clear answer to this because there is no clear directive which instructs head teachers to dismiss female students who become pregnant. Many teachers do dismiss them, however, to set an example to other students and to preserve the "moral standards" of the school. Asante-Darko sent questionnaires to 215 schools and asked head teachers about these issues; of these, 98 responded. The responses (presented in Tables 2 and 3) suggest that, although school teachers have become more lenient towards pregnant students, about half of these do not seem to resume schooling after delivery. It should be taken into account that not only teachers are responsible for the termination of education but also parents, "relevant others" and the students themselves. Surprisingly, the students themselves seem to be harsher in this matter than their teachers, as is suggested by the outcome of a nation-wide survey conducted by the Ghana Teaching Service (1975). These data are presented in Table 4.

Striking, but not surprising, is the unequal treatment of male and female students. It rarely happens that a male student is forced to leave a school because he has made a female student pregnant. The fact that parents in Ghana attach more value to their sons' education than to their daughters' has

TABLE 2. ANSWERS BY HEAD TEACHERS TO THE QUESTION WHETHER MALE AND FEMALE STUDENTS SHOULD BE ALLOWED TO CONTINUE EDUCATION AFTER DELIVERY

	Female students	Male students
Allow them	58	74
Do not allow them	37	20
Total	95*	94*

* Unclear answers excluded.

TABLE 3. ANSWERS BY HEAD TEACHERS TO THE QUESTION: DO FEMALE PUPILS RESUME SCHOOLING AFTER DELIVERY?

They (or most of them) resume	22
Some resume	34
They resume seldom or never	24
Total	80*

* 18 answers (unclear or not applicable) excluded.

been mentioned by several authors (e.g., Robertson 1977; Akuffo n.d.). Even male teachers responsible for the pregnancy of a pupil do not seem to be disciplined in most cases. Another striking point is that a considerable number of teachers and students are still opposed to the return of a female student after the delivery. Most teachers believe that formal instructions order the dismissal of pregnant pupils, but this does not seem to be the case, at least not on the ministerial level. Moreover, a woman is supposed to look after her child herself until the child can walk, which practically forces a female student to stay out of school for a whole year after the delivery. All these factors make it very difficult for a young woman to go back to school after giving birth to a child. Akuffo (n.d.), in a sample of 125 girls who had dropped out of school, found that pregnancy was the major cause (36%). These considerations certainly play a role in decisions concerning abortion. The fact that young women resort to such dangerous abortion practices is a clear indication of the importance attached by them to continuation of education (c.f., Van den Borne 1981).

Value Judgements

Old informants on Akan traditions contradict each other on the point of abortion. Some of them claim that abortion did not occur formerly, others that people detested it, which implies that it did occur. According to Rattray (1927:55–56), one of the first ethnographers of the Akan, people used certain herbs to facilitate a difficult delivery. From this it can be derived that the Akan have a long-standing knowledge of herbs with an abortive effect. It can further be concluded from Rattray's notes that a spontaneous abortion was regarded as induced by witches or other evil powers. Rattray's data strongly suggest that abortion for social reasons was not approved of. Fortes (1954:265), who conducted fieldwork in 1945 in Asante, writes:

> The idea of an unwanted pregnancy in marriage is unheard of. An Ashanti country-woman would be horrified at the suggestion of an induced miscarriage. This applies even to an unmarried girl, provided she has celebrated the nubility ceremony. The only cases I heard of concerned married women impregnated in adultery, which is a very serious wrong against her husband . . .

Clearly, the situation in Ghana has changed radically. It is no longer the ideal to have as large a number of children as possible (Bleek 1976a; cf. Caldwell 1968; Oppong 1977, 1983; Oppong and Abu 1984; Oppong and Bleek 1982; Pool 1970). Children are no longer economic helpers, but rather cost money. Food has become more scarce and material needs have increased. For a young woman marriage and motherhood are no longer the only avenues to acquire social status. Economic developments and western education have drastically changed the value scale. Having children, which

TABLE 4. OPINIONS ABOUT PREGNANCY AND DISMISSAL FROM SCHOOL, BY SCHOOL PUPILS FROM THE WHOLE OF GHANA (PERCENTAGES; DERIVED FROM GHANA TEACHING SERVICE 1975:52)

		Girls who become pregnant should be removed from school		Boys who cause pregnancy should be removed from school		
		Agree	Disagree	Agree	Disagree	N
Middle School	M	80.8	19.1	61.4	38.5	291
Form 3	F	81.3	18.7	75.0	25.0	191
Secondary School	M	74.2	25.8	44.1	55.9	367
Form 3	F	79.0	21.0	68.0	32.0	317
Secondary School	M	69.6	30.4	30.2	69.8	172
Form 5	F	70.1	29.9	62.7	37.3	167
Teacher Training	M	69.6	30.4	20.7	79.3	228
College	F	46.0	54.0	40.8	59.2	98

was formerly the most important step toward social prestige, is nowadays often regarded as a barrier to achieving social success, particularly if children come when the woman is at an early age. All these changes have had an impact on the present opinions concerning abortion.

Before discussing present-day ethics we must, however, briefly look at two traditional customs which cannot be totally detached from ideas on abortion: "out-dooring" and infanticide. The out-dooring ritual was held on the eighth day after a child's birth. On that occasion the child was taken outside for the first time and shown to the community. Only after that moment was the child considered a human being. Out-dooring ceremonies are still being held today, but the idea of the child not being human has gradually declined. If a child died before the out-dooring, which happened quite frequently, the child was not buried as a human being would be. The body was sometimes even mutilated and thrown away, and the parents were not allowed to mourn over it (Rattray 1923:54). Infanticide was practiced when children were born with some deformity (Rattray 1927:55–56). The existence of these two traditions makes it unlikely that abortion, if it was known formerly, was regarded as killing a human being.

Two important and contradictory changes have taken place in the last few decades. Nowadays a newborn baby tends to be regarded as a full human being, and abortion is practiced frequently. Information about infanticide is more difficult to come by, but it seems likely that it is rarely practiced actively nowadays. At the same time it should be noted, however, that people are very pragmatic with regard to handicapped children who are "useless" to the community. Such children often receive too little care to survive and one can rightly speak of "passive infanticide."

There are two starting points to study values: one can start from what people *say* about good and evil, or one can start from what people prefer to *do* in concrete situations. We believe that the latter is more suitable. The former is more likely to produce people's *ideals,* which may include rationalizations and defense mechanisms meant for hiding rather than showing what they really think. When verbal and actual behavior differ considerably, we are probably dealing with a controversial subject. Abortion in Ghana is such a subject.

Starting from what people say, one cannot help thinking that abortion is rejected as immoral by a large majority of the population. A Ghanaian philosopher, Gyekye (1979), writes that in the Akan tradition "to destroy the foetus, that is to say, to cause an abortion would be tantamount to killing a human being, an act which in Akan ethics is considered a very great evil." This argument seems to view Akan traditions in a Christian perspective. Most Akan informants do indeed reject abortion as immoral (Bleek 1976a:219–225). However, the moral condemnations by informants were not so much based on the idea that abortion implies the killing of a fetus, a potential human being, but on the conviction that abortion causes physical dangers to the woman involved. Out of a sample of 100 men, 75 disapproved of abortion, but 67 did so because abortions cause sterility, disease and death. Only four of them referred to the killing of the fetus as a human being. Three others referred more indirectly to this aspect by saying that a great or good person might have grown out of it. These statements suggest that there would be little opposition to abortion if a safe method were used. School pupils, on the other hand, frequently used moralistic terms such as "sin" and "murder" in their condemnation of abortion. The gap between words and actual behavior was striking, as it was school pupils who most frequently opted for abortion when they were confronted with practical problems.

Informal conversation and observation of actual behavior have taught us that this gap between ideal and reality is no coincidence. In certain situations people do not hesitate to induce an abortion and this decision shows the real attitude toward abortion. In this decision pros and cons are weighed and the result reflects people's true value judgements. At the same time uncertainty remains about whether the right decision was made, mainly because the result of the abortion is not predictable. If an abortion results in death or disease everybody will declare that the woman acted foolishly. If the abortion is successful and remains secret, insiders will say that the woman did the right thing. This may sound contradictory, but if ethical behavior is seen as establishing honor and avoiding shame, this attitude proves to be logical and consistent. If abortion can prevent the shame of, for example, having to leave school prematurely, it is good, but if abortion fails it will itself become a matter of shame and be regarded as bad (cf. Bleek 1981b).

Conclusion

Data on abortion are largely restricted to legal abortion (Tietze 1979, 1983). Informative publications on the practice of illegal abortion are extremely rare. An attempt has been made to provide some information on various aspects of illegal abortion among the Akan population in southern Ghana. Its illegal character greatly hampers the conducting of social research on abortion and data are vague and incomplete. Nevertheless, it seems warranted to draw some tentative conclusions.

The foremost one is that the restrictiveness of the Ghanaian legislation has not been able to prevent or restrict the occurrence of abortion. Abortion seems to be practiced very widely and frequently.

The second conclusion is that the outlawing of abortion promotes the practice of clandestine, dubious and highly dangerous abortion methods.

The third conclusion is that young women, often still attending school, are the main victims of the above-described situation. The defective abortion practices and the repressive character of the law account both for inequality in educational opportunities for women and for physical damage caused to them, including sterility and death.

The fourth conclusion is that the traditional Akan world view would probably accommodate the legalization of abortion quite readily (see, for example, Cook and Senanayake 1979).

Finally, the extensive list of abortifacients, many of which are herbal, stresses the need for research into the therapeutic properties of indigenous herbs and other forms of self-medication.

NOTES

[1] The term "abortion" in this article refers to induced abortion.

[2] The Akan constitute a cluster of matrilineal, culturally related societies including, among others, the Asante (or Ashanti), Akyem, Akuapem, Fante, Bron and Kwahu. The number of Akan in Ghana total about six million.

[3] The Danfa Project has produced an impressive number of publications and reports which are listed on pages A8:1-51 of the Final Report.

[4] Martindale (1978:1202) reports: "The insertion into the vagina of potassium perganate in the form of tablets, crystals or a douche, for its supposed abortifacient action, causes corrosive burns, ulceration and severe vaginal haemorrage. It does not procure abortion." Seven references are cited.

[5] The problem of dismissal from school because of pregnancy exists in many other African countries. The situation in Nigeria is described in Akingba (1971).

[6] See Bentsi-Enchill (n.d.); Oppong (1973); Caldwell (1968:128); and Le Poole-Griffiths (1973:104). Pleas for a liberalization of abortion laws throughout Africa can be found in Sai (1978).

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APPENDIX I—LIST OF ABORTION METHODS

The methods are derived from the following authors: 1–53 from Bleek (1976a); 54–56 from Kumekpor and Kumekpor (1977); 57–59 from Ampofo (1971); 60–65 from Asante-Darko (no publication); 66 from Warren (1974); 67–71 from Tiberni (1980); 72–79 from Mensah-Agbokpor (1973–1974).

A. "MODERN" MEDICAL.

1. Dilation and curettage by a medical doctor
2. Instrumentation by midwives, nurses and "dispensers"
3. Menstrogen pills/injection
4. Mensicol capsules in combination with alcoholic drink
5. Alophen pills
6. "Stone cracker" pills, perferably taken with alcohol
7. Apiol and Steel
8. Dr. Bongeans pills
9. Quinine injection/pills
10. Ergometrine pills/injection
11. Primodos Forte injection/pills
12. An overdose of APC pills
13. Dr. Monrose Iodised Blood Purifier
14. Gynavion pills

B. HERBAL (Twi or Nzema name, followed by Latin name).

15. *Nkrangyedua* (Jahropa Curcas)
16. *Menyenemenyeneme* or "milkbush" (Thevetia Peruviana)
17. *Nyanya* (Passiflora Foetida)
18. Mango (Magnifera Indica)
19. Pawpaw (Carica Papaya)
20. Pineapple (Ananas Sativus)
21. *Aberewa Sekan* (?)
22. *Dubrafo* (Grossera Vignei)
23. *Asawa* Cotton (Gossypium)
24. *Opo* (?)
25. Sugar cane (Sacharium Officinale)
26. *Ogyamma* or "Christmas bush" (Alchornea Cordifolia)
27. Lemon (Citrus Acida)
28. *Onyankyera* (Ficus Asperifolia)
29. Coffee (Coffea)
30. Coconut (Cocos Nucifera)
31. Tigernuts (Cyperus Esculentus)
32. *Odum* (Chlorophora Excelsa)
33. *Nunum* (Ocimum Americanum)
34. Cassave (Manihot Utilissima)
35. *Twoantwene* (?)
36. *Ogawa* (?)
37. *Onyina* (Ceiba Pentandra)
38. *Nnukurewa* (?)
39. *Seantie* (?)
40. *Kampepe* (?)
41. *Sorowisa* (Piper Guineense)
42. *Famwisa* (Aframonum Melegneta)

C. MISCELLANEOUS.

43. *Kawu* or *Akaw*, Natron-Native with Carbonate of Sodium
44. Epsom salt
45. *Kontokoli Samina*, indigenous soap
46. Laundry Blueing
47. Soft drinks such as Fanta and Coke
48. Beer
49. Sugar
50. Gunpowder
51. Tobacco
52. *Akpeteshie*, locally distilled gin, or other strong alcoholic beverages
53. Extreme physical exhaustion
54. Guava
55. Mahogany
56. Guinea Pepper
57. (Commelina) twig
58. Herbal pessary containing caustic salts, e.g., Potassium Chlorate
59. Castor oil
60. *Afodoo* (?)
61. Nim tree
62. "Sister Mary" (a liquid medicine, not identified)
63. "Black Power" pills (Potassium Permanganate)
64. *Kankano* (?)
65. M-B. Tablets
66. *Botofufuo* (Gladiolus spp)
67. *Ezuvinli* (Strychnos Sparganophorum)
68. *Nwanzawonlanra* (Palisota Hirsuta)
69. *Eyanuba* (Cassie Alata)
70. *Akpa* (Ipomoea Caprea)
71. *Kodohile* (Sterculia Tragacantha)
72. Egyptian Privet, in Hausa: *Lalle* (Lawsonia Inermis)
73. *Ananse Dokono* (Lantana Camara)
74. *Apem* (Waltheria Indica)
75. *Asansommura* (Maesobotrya, barteri, var. Sparsiflora)
76. *Odubrafo* (Mareya Micrantha) N.B. cf. no. 22 (?)
77. Lead monoxide or Litharge
78. Cantharides
79. Ants

APPENDIX II—ABORTION METHODS AMONG THE NZEMA

The text below is taken from an Italian article by Elvira Stefania Tiberni (1980:167–169). The English translation is by Thomas Crump.

The basic techniques adopted by Nzema women to provoke abortions make use of vegetable substances extracted from leaves, flowers, roots, bulbs and the bark of trees, processed and administered in diverse ways according to the nature of the case.

Of all these substances, only one, *ezunvinli* (*Strychnos sparganophorum*), may actually be effective: as for the remainder, some are no more than tonics or stimulants, while others have diuretic properties or inhibit bleeding.

One has the impression, however, that after generations of experimentation, women have a more or less adequate knowledge of the medical powers of the local plants. The association between the actual effect of the substance used, and its capacity to provoke bleeding which its users hope for, rather than pure ignorance, explain the conviction with which the presumed abortive effect is asserted of plants which are no more than strong laxatives.

On the other hand, the extreme trust that Nzema women have in traditional methods may be justified by the power of extraneous objects or stimulants introduced into the vagina to provoke abortions.

The techniques used must be distinguished according to whether they are intended to be abortive or purely contraceptive. The abortive techniques include those which make use of the *ezunvinli*, a typical West African liana, with massive thorns, although other methods are more widespread. The fruit of the *ezunvinli*, after being pulped and steeped in water, is administered as a beverage.

In the case of the *nwanzawonlanra*, a typical plant of the species *Commelianicae* occurring in tropical Africa, but with no established specific medical properties, the leaves and the roots are used. These, boiled in water, are the basis of an enema, which after two or three days' use provokes bleeding. The leaves of the *eyanuba* (*Cassia Alata*)—a plant of the species *Papilionacae* known for the extreme toxicity of its roots and tubers—after being pulped and boiled in sea water, are similarly used.

The same method of administration is used also for *eyanuba* combined with *ehwiatafinlima* (*Hibiscus Surrattentisis*), which is tonic and refreshing, and for *toane*, an egg-shaped fruit, of which the acid pulp, properly treated, produces a gelatinous substance used as an emollient. The infusion obtained from this mixture is administered from five to seven days before the abortion takes place.

Another method is adopted in the preparation of the leaves of the *akpa* (*Ipomoea Caprae*), a herbaceous plant of the species *Convolvulaceae*. The leaves, reduced to pulp, and then mixed with fine glass splinters, are made up into egg-shaped pellets which are administered *per anum*.

In contrast to the other techniques described, which are used in the first and second months of pregnancy, this last method can only be used from the third month on. The reason commonly given is that only then is the foetus sufficiently developed to be able to absorb the glass splinters, which in an earlier stage of pregnancy would produce internal lesions and bleeding.

The *kodohile* (*Sterculia Tragacantha*), belonging to the family of *Sterculiaceae*, provides an alternative technique. Segments of the stalk, about 8 cm long, introduced into the vagina, are left there for the whole night, during which, according to popular belief, they "dissolve the foetus," although the effective principle is probably that of the probe.

Finally, juice extracted from the leaves of the papaya, *kapka* (*Carica Papaya*), belonging to the species *Caricaceae*, is used to impregnate wads of cotton wool, which are then placed in the vagina for a period of three days.

Mexican Immigration and Health Care: A Political Economy Perspective

by LEO R. CHAVEZ

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This paper examines the case of Mexican immigrants in the United States and their access to medical services within a political economy of health framework. Such an approach stresses that the provision of health care is independent of health factors per se and that access to health care is not equally distributed throughout a population. The first section reviews the three major concepts influencing medical anthropologists working within a political economy framework: (1) the social origins of illness; (2) the allocation of health resources; and (3) fieldwork in Third World countries. The analysis then focuses upon the reasons for limiting