# Anthropology in Research on the Quality of Health Services

## *Antropologia e Pesquisa sobre Qualidade dos Serviços de Saúde*

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*Current crisis in the health sector has increased research directed towards quality of health services. Public health research on quality of services commonly assessed adherence to predefined criteria for building structure, equipment and technical procedures. The paper explores the contribution anthropology can make to health services research by including a lay perspective in quality evaluation. Rapid approaches to the lay perspective assume that conflict between the providers and users of health services result only from the different explanatory models and are thus resolvable through training and education. The holistic approach of anthropology demonstrates that service quality must be located in the wider contexts of health service structure, and the socio-economic circumstances of user's lives as well as differences between medical and lay models of health.*

***Key words:*** *Anthropology; Evaluation; Health Services*

## INTRODUCTION

As the crisis of financing for public services worsens, efficiency in the use of resources for health has become paramount. Measures to increase financing include charges to users on a fee-for-service basis and private insurance schemes. The expansion of the private sector in health provision is thought to result in increased efficiency, choice and quality through competition. The health service network thus becomes characterised by service providers under different management lines, varying financing mechanisms and varying direct and indirect costs for users. Research on health services in the Third World is now turning attention to evaluating the roles and contributions to health care of the private and public sectors, the coordination of different service providers by local managers and the quality of services provided. This paper addresses contributions to studies of quality of health service provision from the field of anthropology.

Quality can be defined and studied from two perspectives, the professionally defined and the user perspective. Public health research typically aims to establish professionally and technically defined criteria which have been shown or at least are likely to be associated with improved outcome. Anthropology has focused on health behaviour and has entered the field of health services research by exploring reasons for use or non-use of services and increasingly the user or lay evaluation of the services provided. The recognition by public health planners of the importance of the lay perspective for health services can be seen as driven by at least three different factors. First, user satisfaction mediates the outcome of care through increased use of services and compliance with treatment. Dissatisfaction is often expressed through tacit rejection of services rather than vocal expression at the service site (Scott-Samuel, 1980). In addition, health professionals concerned with the welfare of their patients by definition must consider their worries and viewpoints. Secondly, the

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emphasis on effectiveness and efficiency involves not only economic efficiency but also social acceptability of health services. In countries such as Brazil where chronic diseases are increasing together with demographic changes in the population structure, the growing need for long-term medical and social care makes the role of user satisfaction even more important. Thirdly, political philosophies have clearly shifted towards consumer sovereignty and demand that health systems respond to this (Williams & Calnan, 1991).

The public health research has on occasions included pre-formatted, structured interviews to evaluate user satisfaction. Alternatives have been rapid exit interviews or group discussions in the community. The anthropological research on user behaviour may juxtapose findings against the medical literature. However, little research has been made on the lay perspective outside of Europe and the USA and the two perspectives are rarely combined and studied in depth.

This paper reviews methods for incorporating a lay perspective into health services research on quality, models for exploring the wider context of both the professionally defined and lay evaluations and the advantages of an approach which includes both perspectives. The paper draws on literature from Europe and the USA and results from a case study of urban prenatal care in Fortaleza, Northeast Brazil (Atkinson & Correia, 1992).

Brazil presented an ideal research environment. After the so-called miracle years of the 'seventies' and 'eighties', systemic changes towards democratisation proposed in the 1988 constitution include a major reform of the health system. The overall goal is greater efficiency and appropriateness of health care provision while recognising access to health care as a basic right for everyone. These goals are considered best met through three major strategies: universal provision of health services, decentralised management and greater focus on preventive care. At the same time, as part of the democratisation of the health services under the health reforms, health policy makers and planners have an increased interest in the concerns and health problems of the users of the health system and the perception by those users of the health services provided. *Ceará* state has demonstrated a strong political commitment to implementing the health reforms.

Issues of quality and coordination of health services present the greatest challenge in urban areas because of the range of different agencies, governmental and private, providing health care. Prenatal care is provided in the Brazilian study area through the public health sector and by private, not-for-profit facilities. Public health services may be under municipal, state or federal management, although the majority are municipally controlled. The not-for-profit facilities are privately owned and are usually hospitals. Evaluation from urban pregnant women of health services is likely to differ from that of their rural counterparts. First, even for those in deprived areas, a choice between service providers may exist. Secondly, urban women are likely to be exposed to information on health from a number of different sources such as their own family or friends, the health sector promotional material and advertising images. Thirdly, many urban women have to find a balance between their reproductive roles as mothers and home-makers and their productive roles in waged work away from the home.

## DIMENSIONS OF QUALITY

The first step in quality research is to identify dimensions along which health services can be evaluated. Establishing criteria for the professional evaluation is relatively easy as a formal body of literature exists which defines the aims and practice of prenatal care considered essential by the community of health professionals (Enkin & Chalmers, 1982; Rooney, 1992). No such set of criteria or dimensions defined by the lay community exists along which services might appropriately be evaluated.

Although various classifications of quality have been proposed, the most frequently used is that proposed by Donabedian (1988) which

evaluates quality along three dimensions - outcome, structure and process. Donabedian stresses that the links between structure, process and outcome are only speculative and little direct evidence of close association exists. Studies of outcome are difficult to design. Process indicators which should determine a good outcome and assessment of structural issues such as buildings and equipment can be studied rapidly to produce results for health service managers. The dimension of process includes all features of the consultation including time, behaviour between the health professional and the client and technical practice of information exchange and clinical examination. Rapid methods sometimes take one aspect of the process, such as rational drug prescription, as a proxy for the whole consultation. Scores and scales can be devised (Pepperall & Garner, 1992) although what these score for or indicate is rarely defined rigorously. Guidelines for building structure, equipment and procedures to be followed in the prenatal consultation have been drawn up by the Federal Ministry of Health for Brazil (PAISM, 1986). These were used as a check-list to assess prenatal care quality through observations in consultations. In addition, a number of questions were included on the check-list about the behaviour of the health professional and of the woman to assess interpersonal behaviour at a simple level. The check-list also allowed room for the observer to make subjective comments on her observation of each consultation.

Although initially grouped according to Donabedian's dimensions of structure and process, the majority of the observations fell into the process category, which thus proved too broad and unwieldy for analysis. Instead, equipment was grouped together with organisational issues of the service such as the health personnel taking the consultation, use of various recording sheets and cards, waiting time and length of the consultation. The other process aspects were grouped as information collected from the woman, information given to the woman, the behaviour to and from the woman and the clinical examination. Different service providers and different health personnel could then be compared by these dimensions. Observations of prenatal care could only be analyzed from the professional perspective.

Explicit dimensions do not exist for the lay evaluation but approaches to the lay perspective which use pre-formatted, structured questionnaires are commonly based on certain assumptions. Dissatisfaction has often been found to relate more to the interactional aspects of the service provision than to the actual content of the care (Chalmers et al., 1980). Patients are said never to evaluate medical care on grounds of clinical competence or expertise and rarely evaluate modern medical practices such as the value of drugs and other technology (Calnan, 1988). Criticisms rather focus on qualities of the health professional, his or her performance in the consultation, the ability to listen, to reassure and to communicate information. The suggestion has also been made that some criteria are the same across all medical settings, for example that the most important criterion is the degree to which the health professional communicates information to the patient. Although evidence exists for these assumptions Calnan (1988) suggests the argument is circular as the survey design also assumes this from the start and thus does not allow for other issues to emerge.

Constructing a lay evaluation thus requires an open approach which allows the patients to bring up concerns, perceptions and complaints themselves from which dimensions for a lay evaluation can subsequently be drawn. Research on lay evaluations on health services which use open interviews and ethnographic approaches have questioned a number of the assumptions.

First, the fundamental orientation of satisfaction surveys is questioned. Positive and negative comments on health services are rarely expressed in terms of satisfaction or dissatisfaction and are not reducible to such. Similarly, criteria may not be constant across different medical settings and differ depending on the reasons for using a service. Secondly, the greater importance of process factors is questioned. The reactions to the actions of the health professional were shown

to be of secondary importance unless related to the current concerns of the patient. Judgements of outcome were more important than judgements of process. Thirdly, patients were found to pay attention to and comment on a far wider range of aspects of the consultation than just the interactive behaviour with the health professional (Fitzpatrick & Hopkins, 1983). An increase in evaluation of technical aspects has been shown with the number of consultations for a specific ailment, demonstrating that satisfaction changes over time (Calnan, 1988). The need to interview patients in some depth as opposed to rapid exit interviews is highlighted by the finding of a high level of satisfaction on general aspects but much greater dissatisfaction when specific issues are addressed (Fitzpatrick & Hopkins, 1983). A lay evaluation, therefore, needs to make use of open interviews which takes the patient through the experience of using the health services which allows concerns and interests of the patient to emerge and which focuses on the different stages in health seeking and consultation allowing for specific positive and negative comments to be made.

The Brazil study interviewed fifty-one women of seven or more months pregnancy in poorer districts of the study area. The conversations with pregnant women were analyzed to identify the factors they liked and did not like at the prenatal consultation. The dimensions of quality of Donabedian — structure process and outcome were found inadequate for analysis of women's concerns, again the dimension of process proving too broad. Similar to previous studies in Europe and the USA, women did not express their likes and dislikes in terms of satisfaction or dissatisfaction, had no criticisms of the health services if asked generally but expressed positive and negative views on specific aspects of care as they were taken in detail through the history of the pregnancy. Dimensions along which women expressed positive and negative views were aims (or not meeting expectations), advice, interpersonal behaviour, organisation including convenience and technical practice. The latter dimension indicates that contrary to the assumptions made in many studies, users were competent to assess technical aspects of care, particularly those women who had experience of prenatal care from previous pregnancies and of other health facilities. They were well aware when the full complement of procedures, such as taking blood pressure, weight etc. had not been done or if these were not done regularly.

The dimensions that emerged from the two evaluations in Brazil thus paralleled one another and are presented in Table 1:

**TABLE 1.** Professional and Lay Dimensions for an Assessment of Quality

| Professional | Lay |
|---|---|
| | Expectations |
| Organisation | Organisation |
| Information given | Advice |
| Clinical examination | Technical practice |
| Behaviour to and from women | Interpersonal behaviour |
| Information taken | |

The lay evaluation did not assess information taken directly but did so implicitly within the dimension of interpersonal behaviour. The lay evaluation added another dimension of expectations not shared by the professional perspective. Although the professional and lay dimensions are similar, the different labels for each originally used in analysis have been retained to stress that the two evaluations are parallel rather than identical. Within each pair of dimensions, the details differ between the professional and lay evaluations. The rest of this section discusses the nature of the relationship between the two evaluations for each dimension.

## Expectations

The lay evaluation indicated that some women no longer continued attending prenatal care when the service did not meet a previously held expectation, particularly when women wanted a sterilisation and were refused one. This issue is exclusive to the lay evaluation and of no concern or relevance directly to the issues described by the

professional evaluation. This dimension of expectation overlaps with the issues raised in the wider context, particularly the inadequacy of family planning services.

### Organisation

The professional evaluation identified a number of aspects of organisation which were never raised as of importance to women. These were equipment, time of consultation and privacy. These issues therefore can be classified as exclusive to the professional evaluation and of no concern or relevance to the lay evaluation.

Organisational concerns from the lay evaluation were similarly specific to that perspective. The issues related to the appointments system, convenience of the facility, convenience of having laboratory tests done and continuity of the health personnel attending. The professional evaluation noted that most not-for-profit health facilities have their own prenatal card but did not identify this as necessarily a problem. In the lay evaluation however, a small number of women were interviewed who normally attended prenatal care at one facility which they liked but who were additionally attending prenatal care at a second facility in order to obtain a sterilisation. Another described how she had to register to attend prenatal care in order to have her laboratory tests done at that facility, the results of which she then took back to the facility where she regularly attended. This double attendance and double registration reflects competition between local services for numbers, is wasteful of women's time and wasteful of health sector resources.

These aspects of organisation, although exclusive to the lay evaluation are not however irrelevant to the professional side. The services are organised for the convenience of the health professional and the inconvenience created for women is thus in conflict with the professional aspects. This group of issues can therefore be classified as exclusive but in conflict.

### Advice and Information Given

Both the professional and lay evaluations highlighted the poor performance of most health facilities on information given to women or advice. These dimensions include both explanations given to women and advice on health promotion. The results indicate that the screening role of prenatal care for risk detection has become the only aim at many facilities. However, both professionals and women view this as inadequate. Health professionals indicated in interviews that advice for health was part of prenatal care and that they would give advice on a number of topics albeit somewhat unsystematically. Women gave positive evaluations when advice for health care and reassurance on the progress of the pregnancy were given. Negative evaluations were given when women felt no information of an explanatory nature had been given such as to explain the need for laboratory tests or to explain the problems when someone was identified as a high risk case.

The issues defined within the dimensions of advice and information given are the same across both the professional and lay evaluation and are thus classified as corresponding.

### Technical Practice and Clinical Examination, Information Taken and Interpersonal Behaviour

Some overlap is seen between the professional and lay evaluations regarding technical practice in prenatal care. Women are not aware that the first clinical examination should be more extensive nor do they comment directly on the collection of information concerning antecedent risk factors, both of which are identified by the professional evaluation as poorly done. Women do however comment directly on technical practice when actions of the standard clinical examination are not performed and indirectly on information taken within the dimension of interpersonal

behaviour which highlighted the importance of general conversation and interest shown by health professionals in the women. The lay and professional evaluations along these dimensions are thus not exactly the same but rather complement one another.

One issue within technical practice specific to the lay evaluation is the rejection of iron sulphate pills. Exploration of the wider context indicated a combination of economic constraints on purchasing remedies, bad physical side-effects and beliefs about the role of blood in the body as explanatory factors for rejection of iron sulphate pills.

### Interpersonal Behaviour, Behaviour to or From Women and Attitudes of Health Professionals

Observations of behaviour towards women indicated that health professionals were generally polite, if brief, but few women asked questions during the consultations. On the other hand, a common complaint of women regarding health staff behaviour was that they were treated like animals, made to feel stupid, told off and shouted at. More illuminating than the professional evaluation from observations were the interviews with health staff about their attitudes to the women. Although the majority were sympathetic in theory to women's plight, their own frustrations as health professionals were directed to the ignorance, lack of education and traditional practices of their clients.

This group of issues of interpersonal behaviour can be classified as in conflict between the two evaluations and in a way that one side mirrors the other. In a busy health facility with a fast turnover of consultations, the attitude of health professionals that poor urban women are ignorant will inevitably lead to women being snapped at and made to feel stupid from time to time.

### Role of Nurses

The discussion of the role of nurses, although strictly a part of the dimension of organisation, has been separated as it is a major feature of health service planning. Health professionals in interviews expressed mixed views on the appropriate role of nurses in prenatal care which followed a difference in practice between private, not-for-profit and public service providers. However, nurses did as well as physicians in both the professional and lay evaluations and indeed did better on certain dimensions. The issue of the role of nurses can thus be classified as corresponding between the two evaluations.

### Correspondence, Complementarity and Conflict

The relationship between the lay and professional evaluations thus corresponds regarding the paired dimensions of advice/information given and for the role of nurses. Complementary issues concern the paired dimensions of technical practice/clinical examination and interpersonal behaviour/information taken. Issues within the lay dimension of expectations and certain professionally defined issues of organisation are exclusive to their evaluation and not of direct relevance to the other evaluation.

There are two categories of issues which conflict. The first is where the issues are exclusive but relevant to each other. This involves organisational factors where convenience for health professionals may clash with convenience for the user. The second is where the issues mirror one another. This involves aspects of interpersonal behaviour detailed in the lay evaluation which are reflected in the paternalistic attitude of health professionals towards women revealed in interviews.

## INFLUENCES ON THE EVALUATIONS

A part of the aim of the research was to identify influences on the results of the professional and lay evaluations. Little work comparing results from the two types of evaluations has been made. However, the focal point where the two perspectives meet is in the consultation itself and much research over the last two decades in Europe and the

USA has been directed to the patient-physician interaction. Two approaches are used: those which examine the relationship at an individualistic level and those which place the relationship within the wider power relationships of society (Pappas, 1990). Conflict issues between the health professional and the user are interpreted on the one hand as arising from a clash of explanatory models or different frames of reference and on the other as resulting from political and economic differences.

An anthropological approach is more holistic and thus offers the possibility of addressing both spheres of potential influence and assessing the relative contributions of each. Calnan (1988) tentatively suggests five aspects which need to be addressed in order to interpret a lay evaluation within the context in which the users themselves are operating:

- the specific reasons why health care was sought;
- the level and nature of experience of health services which creates some expectations;
- lay images of health which shape judgements about health care;
- the socio-political values or ideologies upon which the particular health care structure is based;
- socio-demographic aspects of the lay population which might mediate other aspects of the evaluation.

The value of work on explanatory models is the emphasis given to both sides of the medical relationship, rather than assessing the lay perceptions against the "correct" biomedical model. Thus similar aspects need to be explored regarding the context of the professional side of the evaluations also. For example, explanatory models can be elicited from any sector of the health care system.

"*problems in clinical communication frequently represents conflicts in the way clinical reality is conceived in the popular, folk and professional arenas of the health care system*" (Kleinman, 1978).

Calnan's model has been modified slightly for this research. The first two aspects of Calnan are grouped together here as expectations and health seeking behaviour while the second is referred to as explanatory models. It was beyond the time constraint of this research to explore fully the political and economic processes affecting health service delivery and thus only limited aspects of the structure of health services in urban areas are discussed with health workers. Lastly, social and economic features of urban women and their reproductive health are considered.

## Expectations and Health Seking Bhaviour

Studies of health seeking behaviour have often indicated that factors of perceived need are the dominant predictors of use (Fosu, 1988). For curative care, this relates to the perceived seriousness of the illness and the appropriateness of the formal health sector to treat the complaint. In the case of prenatal care, perceived value of a preventive service together with perceptions of potential risks which can be avoided may present significantly different concerns than research on perceived need within curative care. Social psychological explanations have suggested that levels of patient satisfaction are shaped by a difference between patient expectations of service and the service received. However, recent research has shown that patient expectation is a problematic concept as some have no expectations, while others have uncertain expectations. Calnan (1988) suggests a more fruitful approach is to examine patient's reasons or motives for seeking care rather than exploring expectations.

In the Brazil study, all physicians involved with prenatal care defined the aim as detecting diseases and problems during pregnancy. Only three of the thirteen mentioned the importance during pregnancy of orientation to food, child care and breast feeding. Two mentioned preparing the woman psychologically to be more confidant about the birth. There was no difference between

those in public and those in private, not-for-profit services. All the nurses worked in public health facilities except one who did not have different views. Two of the nurses did not mention the detection of risk cases. Six mentioned aspects of orientation including other health services, vaccines, laboratory tests, going to see the physician, food and child care. One explicitly stated that the nurse can explain the laboratory tests, vaccines etc. better than the physician. One nurse stated that problems can be detected from a history of previous problems or changes during the pregnancy, indirectly stressing the importance of collecting the personal, family and obstetric history.

Physicians were additionally asked why they thought women came for prenatal care. They emphasised strongly the increase of information about the importance of prenatal through the media and the community health workers. They also pointed out that the nurses indicated the availability of prenatal care when women come to the health facilities for other reasons. The importance of information past by word of mouth between women themselves was also recognised. Some physicians reflected the element of competition between nearby facilities indirectly in the way they worded their answer. They clearly interpreted the question as why women came to this particular facility rather than why women attend prenatal at all. Facility-specific issues were that women heard there was a good physician here, that they received commodities such as food and milk. One physician who did sterilisations stated that many came to do prenatal at his centre in order to have the opportunity for a sterilisation.

Women's contributions in discussions of the motivation for doing prenatal care fall into four broad categories: health check, health education, material gain, insurance. The first two categories overlap with the formal aims identified in the literature on prenatal care and the aims defined by health professionals involved in prenatal care in the study area.

Health check reasons can be further divided into fear and more positive approaches. The fear group covers perceptions of serious risk. Women have heard through the media or by hearsay that women can die in birth. A relatively small number know someone who has died previously in birth. A further few have had problems themselves in birth before and appreciate that this can be identified and reduced through prenatal care. A less strong sense of fear is given by those identifying the need of many women to have a caesarean and that it is better to know this beforehand so that you go to a health facility where this can be performed. The more positive responses were those who stressed the reassurance side of prenatal care. This is encouraging for promoters of prenatal care as it suggests that women do recognise that prenatal care for the majority operates to confirm that all is well rather than to give treatment to relieve general aches of pregnancy.

The importance of education towards birth, child care and care during pregnancy was mentioned although less frequently than health check issues. This should reflect the observational results that only very few health facilities do in fact give much advice formally plus a few where the nurse or physician did give advice in an unsystematic fashion.

A third category was that of material gain. A small number of health facilities do or have in the past given out food to pregnant women and have registered those doing prenatal care as eligible for milk for the baby. Thus a few women identified the receipt of food stuffs as a reason for doing prenatal care, and particularly for doing prenatal care at that particular facility. This involved three women who were doing prenatal care in two places each month, in one to receive food and in the other to obtain a sterilisation.

This introduces the last category of motivations, the insurance category. There were two kinds of insurance reasons given for doing prenatal care. The first was the desire for a sterilisation. Not all physicians perform sterilisation and those that do mostly do this during the birth if it is a caesarean or shortly after. The women perceived first that they were more likely to succeed in obtaining a sterilisation if they did prenatal care and took the opportunity of the medical consultation to discuss the sterilisation and secondly, that to

do a sterilisation, the operating physician will need to know your blood type and that it is good to have the anti-tetanus vaccination if you are going to be cut. The physician will not do a sterilisation if they do not have this information and the way to get it is by doing prenatal care.

The second kind of insurance is a cause for serious concern. The perception of women is that the birth will be easier if they have done prenatal care. For a small number this was rather literal, that the pains and duration of the birth would be eased merely by having done prenatal care. However, women also had a more critical view of the health services. If you were admitted but had not done prenatal care you would receive less good treatment. They understood that if you had not done prenatal care, some hospitals would not admit you for birth.

*"You get better help at birth if you've done prenatal" or "the hospital asks where did you do prenatal care, with whom. They don't receive you if you haven't done prenatal — they aren't responsible for you if you haven't done prenatal".*

Women's motivation for doing prenatal care thus overlaps with that of the professional definition of the aims of prenatal care, but goes further incorporating aspects of direct and immediate individual benefit. Two physicians were aware of the material gain and insurance for sterilisation motivation, being physicians at facilities providing those services. Health professionals interpretation of the question regarding women's motivation as facility-specific highlights a concern not shared by the women of competition for cases and thus resources.

## Explanatory Models

Perceived need is underpinned by the explanatory models different groups of people hold regarding the functioning of the body, classifications and etiologies of illness and necessary remedy (Kleinman, 1978; Cominsky, 1982; MacCormack, 1985). The analogous factor for preventive prenatal services would be perceived risks and benefits which in turn relate to the explanatory models women hold about pregnancy.

In Brazil, most urban women expressed clear perceptions of risks to be avoided and benefits of health promotion to be gained through preventive prenatal care for both themselves and the child. At the same time, pregnancy was not viewed as a special medical event and there are no rules circumscribing behaviour during this period. This contrasts markedly with the month immediately after birth (resguardo) when many constraints on food and activities operate. Research on pregnant women in Jamaica reported the same observation (Wedderburn & Moore, 1990). The majority of women valued the notion of a screening service, stating that a reason for attending prenatal care was to know that all was well with the child. However, amongst the small number interviewed who did not attend prenatal care, many stated that prenatal care is only useful if the pregnancy is not normal. The concept that prenatal is necessary to identify or screen for cases where the pregnancy is not normal is thus rejected by an important minority.

Although seen as a normal state, women are well aware that being pregnant is associated with certain health risks. A lay epidemiology (Davison et al., 1991) of risks and associated etiological factors was constructed from interviews for the four most important concerns, caesarean, abortion, anaemia and pressure. Perceptions of risk and etiology can influence attitudes to the formal health services, particularly where information is not given to explain complications or the progress of the pregnancy and where remedies and advice for health promotion are given. Most women were able to describe adequately the reasons for vaccines, iron supplementation and other areas of advice. The common rejection of iron sulphate found in Brazil cannot therefore be blamed on ignorance of its benefits. The combination of bad physical side-effects with understanding of the role of blood and the dangers of pressure jointly explain the widespread rejection.

The research only allowed for a structural

description of knowledge rather than analysis of the process by which knowledge is gained (Young, 1991). A categorisation of the apparent sources of urban women's knowledge about pregnancy, risks, health promotion and prenatal care demonstrated a mixture of possible processes in which a simple model of opposition between folk and medical knowledge is inadequate and in which different sources of information drawn upon were juxtaposed, reinterpreted and combined in defining dangers during pregnancy. The hot-cold humoral classification or theory is said to be the basis of folk medicine in much of Latin America (Foster, 1987). Organs, physical and mental states, food, drink, medicinal remedies and supernatural forces are all classified as hot or cold, a classification which has nothing to do with temperature, but describes symbolic power (Logan, 1975). Health is maintained by a balance in the hot-cold opposition in the body while illness is treated by a remedy of the opposite classification to that of the illness. The physical state of pregnancy is classified as hot and might be expected to be associated with health promoting practices to maintain balance. However, the construction of knowledge and explanatory models around a condition that is not perceived as an illness is less explicit than for curative models and the hot-cold classification said to underpin all models of illness and treatment in Latin America was not explicitly described, although intimated on occasions. This may indicate tentative support for recent discussions in the medical anthropological literature questioning the dominant and determining role given to the hot-cold classification in Latin American explanatory models of health (Foster, 1988). Further exploration of the processes by which knowledge is constructed in urban areas and the influences on those processes is likely to prove an important area of research for both urban health and for preventive health services.

Health professionals generally demonstrated some sympathy for the social and economic circumstances of the local women. However when discussing their own problems and frustrations from working in the area, issues of non-compliance regarding advice, doing tests, continuing prenatal care, taking vaccines and so forth were largely blamed on the ignorance and lack of education of the women,

"*very low cultural level, question of culture, of ignorance*"
"*only have the dot on the 'i', they don't have an IQ*"

There was no appreciation that women might have a different frame of reference, different priorities or different concerns beyond acknowledgement of financial constraints on buying medication or travelling for tests.

Suggested improvements were mostly technical, requiring better equipment, local capacity to do laboratory tests and more specialists. The focus was thrown back on the identification of risk, its management and attending complicated births at these primary health facilities. An exception was provision of free medications since not all could afford the costs otherwise. Only three mentioned aspects of health promotion, supporting the idea of providing lectures and discussion on pregnancy, birth and child care. On the personnel side, nurses considered the role of nurses in prenatal care should be increased and both types of health professional thought their terms of employment could be improved to increase fairness and motivation.

One interpretation of the health professionals' attitudes and approach is to locate them within a medical model which defines the role of health services to provide care from those who know what is needed to those who do not. The health professionals have been through a long technical training making them the experts and thus best able to determine what is important and what not in prenatal care. Armed with their expertise they aim to provide a service for women which screens individuals for risk factors and to pass advice on general health promotion so as to reduce risks of mortality and morbidity for them. Additional technology and more specialised health personnel were frequently

identified as inputs which would improve the quality of the prenatal care service. Given this orientation from the medical training, it is not surprising that when health professionals encounter passive opposition from users in the form of non-attendance and non-compliance with advice, their reaction is irritation and frustration that women do not have sufficient education to understand that modern science and the modern health professional know best. Related to this was the implication given from the private, not-for-profit facilities that using nurses to take prenatal care consultations would provide an inferior quality of service.

## Structure of the Health Services

An explanation of conflict between professional and lay perspectives based on the training of professionals into the biomedical explanatory model of health is only one part of the problem. In Brazil, two structural aspects of the urban health system are likely to influence the quality of health services as defined by both professional and lay perspectives: vertically managed parallel networks of health services and different financing schemes.

The importance of technology and specialists for quality of service is not only a result of the medical training. These are both visible signs of a superior service, professionally defined, which the potential user can also see. Within a context where health is high on the political agenda and many local politicians are involved in management of private, not-for-profit health facilities, the claim that one facility has a superior service than another can carry significant political clout. Several health professionals, particularly physicians, discussed women's motivations to attend prenatal care in terms of choice of specific facility.

Another crucial aspect of context concerns the financing of health services. Health facilities which are available to all users obtain the greatest part of their finance from *Instituto Nacional de Assistência Médica da Previdência Social* (INAMPS). In order to control quality, INAMPS has established guidelines on the number of consultations to be made per person per hour and has set upper limits on the number of claims each facility can make within any payment category. The important categories for primary prenatal care are basic consultations and laboratory tests. Thus the income of any health facility largely depends on the predetermined numbers of consultations, tests and so forth. Each facility wants to demonstrate that the demand for services is far greater than that allocated. This creates direct competition locally between health service providers. At the individual or personnel level, health professionals are employed variously by managers of private, not-for-profit facilities, the federal ministry or the state or municipal health secretariats. Contracts vary from those on set salaries to those paid by consultation numbers. Health professionals within the same facility may be on different types of contracts with different incomes for the same job while differences in payment between health service providers are great. During the time of the survey, health professionals in state and municipal hospitals were on strike because of the difference between their salary and that of professionals in the federal INAMPS hospitals. The claim was that if decentralisation is to coordinate and standardise management locally, then local health professionals in different facilities should be on the same schedules of payment for the same jobs. Lastly, health professionals commented that better terms of employment would improve service quality through increased staff motivation.

Comparison of quality of health services from different providers are few in the Third World. One urban study of curative health services was carried out in Dar-es-Salaam, Tanzania and explored staff motivation as a determinant of quality through interviews with health workers. Health workers were demoralised through not only inadequate salaries, but also failure to implement some of benefits already approved as part of personnel

packages. Preference for working in public services rather than private mission clinics was linked to job security, opportunities for further training and retirement benefits (Kanji et al., 1992).

### Social and Economic Features of Women

With rapid socio-economic changes in recent decades, women's role has undergone much change, the transition from high to low fertility is advanced and the ideal family size reported by young women indicates that fertility will continue to fall. This is associated with increased educational levels and participation in the labour force. Women of reproductive age make up about a quarter of the population at present. Reproductive health in Brazil is marked by a number of particular concerns. In the urban population there is an increasing number of adolescent pregnancies, demonstrably associated with poor pregnancy outcome and subsequent child survival and development (Lima et al., 1990). The provision of family planning services are a source of current controversy and debate while the rate of illegal abortions is very high and a major cause of maternal mortality (World Bank, 1991). A survey in 1986 found that all women over twenty and 97% of teenagers over fifteen knew of some method of contraception, the most common being the pill and female sterilisation. However, many who knew of various methods could not identify a source. The most striking finding was the importance of pharmacies as the source of most family planning methods rather than the public health centres (World Bank, 1991). Another aspect of growing concern regarding pharmacies is the easy availability of abortifacient drugs such as cytotec (Coelho, 1991). Problems arise in the use of this drug as an abortion is not always provoked, but does result in a high percentage of birth defects and subsequent infertility (Medeiros, 1990). Lastly, Brazil has the highest rate of caesarean section in the World, a procedure associated with an increased mortality risk among the poor.

Urban women may face particular difficulties operating a balance between their reproductive roles as mothers and home-makers and their productive roles in waged work away from the home (Nash & Safa, 1986; UNICEF, 1989). Achieving a balance becomes particularly difficult in households headed by single women or where the woman is the main income-earner, a form of household which tends to be more common in urban than rural areas (Chant, 1989). The difficulties of balancing employment away from the home with reproductive work has resulted in many women in Latin America employed in work that can be done at home, the so-called cottage industries or in small-scale enterprises that draw upon their skills as home-makers such as sewing, washing or the preparation of foods (Norris, 1988; Logan, 1981; Kemper, 1981). Brazil has legislated for maternity leave, time off to attend prenatal care and workplace creche facilities (Hardy & Osis, 1991) but no evaluation of these measures has been made in urban *Ceará*.

Women firmly locate problems in pregnancy or birth within an overall background of social and economic deprivation, difficult relationships with husbands or partners and poor general health. Few women were actually working away from the home in the late stages of pregnancy, only a couple had formal leave from employment and none were certain of getting their jobs back after the birth despite legislation to facilitate the balancing of women's dual roles. The concepts of weakness (*fraqueza, moleza*), having strength (*força*) and general conditions or capacity (*condições*) are frequently used and are fundamental to the way women perceive their lives and their health.

Against this background of poverty and weak health, the majority of women had not planned their pregnancy, a number had attempted to induce abortion and there was a widespread desire for sterilisation. The inadequacy of family planning services is strongly indicated by this as well as specific problems experienced by women when taking

contraceptive pills. The desire to control fertility through sterilisation emerged as an important motive for attending prenatal care.

### Relationship of the Lay and Professional Evaluations

The discussion of the relationship between the two evaluations does not agree with the view that the health services and the women using them are based on entirely different frames of reference as has been described for the UK (Garcia, 1982). The two perspectives are rather seen as based within different contexts which nonetheless do overlap for some issues. There remain areas of conflict between the two perspectives which may not be entirely resolvable. The asymmetrical relationship associated with clashes of interests between service provider and client which has been documented for many different service areas including prenatal care (Lazarus, 1990), may be ameliorated by sensitisation of providers to the problem through training but is an intrinsic structural feature of the relationship and thus impossible to eliminate entirely. As other authors have noted, the social structure of the wider society also enters into the consultation room as the typical service relationship is further exacerbated in these medical consultations by marked class differences and, in half the consultations, by gender differences between health professionals and poor urban women. Associated with this asymmetrical relationship is conflict arising from misperceptions of one side by the other, particularly that of health professionals viewing poor urban women, albeit sympathetically, as largely ignorant of health issues. The research demonstrates that it is rather most of the health professionals who remain ignorant of the motivations and expectations of their clients.

Rapid appraisals of knowledge, attitudes and perceptions by definition focus on the lay explanatory models of health and their conflicts with modern medical knowledge. The example of non-compliance with advice to take iron sulphate found in this research indicates the dangers of this focused approach. Although differences do exist in the lay and professional explanatory models of blood, this is only one of a number of factors influencing rejection of iron sulphate. Other factors which are equally important, if not more so, are the costs, availability and physical side-effects of the iron sulphate pills. This pattern pervades the whole of the lay evaluation which is not influenced exclusively by the perceptions of risk and health promotion benefits but is equally influenced by the social and economic circumstances of women, their productive roles and their desire to control family size. Similarly, the professional evaluation is influenced not only by training health professionals into the modern biomedical culture but also by competition between services for political influence and conflicts between and within services over financing and terms of employment for personnel.

Research on health models in Bahia, Brazil, emphasised the need for what the author calls an ecological model where all factors are given equal weight as opposed to tendencies to overstress supernatural or “world view” explanations (Ngokwey, 1989). The findings presented from this research demonstrate the importance of such an approach and found the categories suggested by Calnan useful as a starting point for structuring the analysis (1988). The explanatory factors found here for the lay evaluation were motivations, explanatory models and social and economic factors including family planning and for the professional evaluation were explanatory models including aims of prenatal care and the structure of the health system. A summary of the relationship between the two evaluations is given in Table 2.

## VALIDATION OF THE APPROACH

Although the overlap between the two evaluations is substantial, there are also differences. The most striking is the lack of importance given by women to the length of the consultation and privacy compared with the complaints levelled at the appointment system. The capacity of women to evaluate aspects of the clinical examination and their

**TABLE 2.** The Relation between the Two Evaluations: Dimensions and Contexts

| Category | Lay | Professional |
|---|---|---|
| Corresponding | Advice<br>Role of nurses:<br>can do prenatal care | Information given<br>Role of nurses:<br>quality good |
| Complementary | Technical practice:<br>clinical examination<br>Interpersonal behaviour:<br>interest shown | Clinical examination:<br>1st examination<br>Information taken:<br>risk antecedents |
| Irrelevance | Expectations:<br>refused a sterilisation | Organisation:<br>equipment, time of<br>consultation, privacy |
| Conflict: mirror | Interpersonal behaviour:<br>stupid, told off, inferior | Attitude:<br>ignorance, education,<br>traditions |
| Conflict: exclusive | Organisation:<br>appointments, lab. tests,<br>continuity of personnel | |
| Conflict resolution | Women well informed, not<br>ignorant:<br>screening<br>vaccines<br>benefits of iron | Training orientation<br>Coordination between<br>facilities |
| Wider issues | Family planning<br>Iron sulphate rejection<br>Work and pregnancy | Financing of facilities<br>Competition for users<br>Different salaries<br>Job satisfaction |

demand for more information and explanation challenges the attitude that a simple reassurance that all is well is not adequate. The additional motivations for attending prenatal care, especially the desire for a sterilisation, exposes the need for attention to the family planning services as an inseparable part of prenatal care.

The professional evaluation, even if done extensively on a large sample, would only have produced counts of adequacy, whether factors that are well or badly done tend to cluster and how different service providers and specific facilities rate against one another. At the end, a few recommendations for improving details of practice would emerge together with a sense of so what about many of the dimensions. With the additional input of a lay evaluation which has been carried out to permit the women themselves to define the issues, the importance or meaning of some of the professionally defined dimensions for the user has been clarified and further issues of concern to the user have been identified. If the aim of decentralisation is to increase democratic participation in health service management, then a quality assessment must incorporate a genuine opportunity for users to express their views.

The approach adopted was intensive, focusing on description of health service quality from a small number of facilities and users but placing health service quality in the broader contexts of the professional and lay

worlds. The benefits of considering the wider context is seen in the number of additional issues which are raised as needing attention. These issues are the difficulty for pregnant women to continue work, the need for improved family planning, the awareness and knowledge women have about risks and health during pregnancy which does not clash with the professional view but rather goes beyond it and managerial problems both within and between different service providers needing to be addressed as part of the decentralisation process.

The unstructured in-depth interview was time consuming to carry out and analyze in contrast with pre-formatted questionnaires which could have been addressed to large numbers at health facilities on exit. One interview was carried out within a health facility. The interview took place in a separate room with the door closed and although the woman being interviewed was clearly not happy with the service she had received, she was very monosyllabic and loath to go into details in that setting. Across almost all interviews, unless the woman had a particularly bad experience, women did not criticise health services when asked directly what they liked or did not like and how services could be improved. Most said that everything was good and nothing needed to be improved. This question was always posed near the end of the interview. By contrast, the more open-style used in most of the informal discussion of the interview allowed many to describe both likes and dislikes of specific aspects of the prenatal service. One woman was quite explicit as to her reluctance to directly comment on the health services when she pointed out that if there was an emergency she would have to go to the local health facility and did not want them to know if she had made bad remarks about their service. Similar problems with exit interviews were encountered in research on quality of curative services in urban Tanzania (Kanji et al., 1992).

The long open interview allowed women to talk about their lives generally, providing the descriptions required for analysis of the wider context. Asking for a simple description of the life history and obstetric history often served to make women feel relaxed in the interview before asking them for explanations and opinions on aspects of their pregnancy.

The strength of the approach is that it offers the opportunity for those groups whose voices are less often heard to present their views with equal weight as those more forceful elements. The weaker groups within the health system tend to be the users of health services, especially the poorest and women, or health professionals and paramedical staff of the lower cadres, who are vital in the implementation and success of health programmes. The approach can explicitly identify areas of consensus and conflict between perspectives and the features which inform them. Although no guarantee of resolution, where there is a will to resolve the problems, this may present a vital first step towards defining a workable compromise.

The approach can obviously be applied to other questions of service quality. It also lends itself well to issues of health promotion. There is potential for the approach in assisting with the difficult process of decentralised management and the likely areas of conflict between service providers, between health and other sectors and between the different local groups formally represented on the health management committee. Almost all aspects of health planning could benefit from an approach which aims to explore the viewpoints of different groups, since most issues involve groups of people with different interests and perspectives whether between different groups of health professionals and managers or, as here, between groups within and outside the formal health sector.

## RESUMO

ATKINSON, S. J. **Antropologia e Pesquisa sobre Qualidade dos Serviços de Saúde.** Cad. Saúde Públ., Rio de Janeiro, 9 (3): 283-299, jul/set, 1993.

A presente crise no setor saúde causou uma expansao da pesquisa ligada à qualidade dos serviços de saúde. Pesquisas na área de saúde pública ligadas à qualidade dos serviços geralmente avaliavam o uso ou não de critérios predefinidos para edificações, equipamentos e procedimentos técnicos. Este trabalho enfoca a contribuição que a antropologia pode dar para a pesquisa em qualidade de serviços e inclui critérios populares na avaliação da qualidade. Métodos de avaliação rápida de critérios populares indicam que os conflitos entre os provedores e os usuários dos serviços de saúde são decorrentes apenas de divergências quanto a modelos explanatórios e, sendo assim, podem ser resolvidos através de treinamento e educação. A abordagem holística em Antropologia demonstra que a questão da qualidade de serviços deve ser vista dentro do contexto da estrutura dos serviços de saúde, das circunstâncias sócio-econômicas da vida dos usuários e das diferenças entre os modelos médicos e populares de saúde.


**Palavras-Chave:** Antropologia; Avaliação; Serviços de Saúde

## REFERENCES


ATKINSON, S. J. & CORREIA, L., 1993. *Quality of Primary Health Care in Urban Brazil: A Case Study of Prenatal Care*. London: Urban Health Programme, London School of Hygiene and Tropical Medicine.

CALNAN, M., 1988. Towards a conceptual framework of lay evaluation of health care. *Social Science and Medicine*, 27: 927-933.

CHALMERS, I.; OAKLEY, A. & MacFARLANE, A., 1980. Perinatal health services: an immodest proposal. *British Medical Journal*, 22: 842-845.

CHANT, S., 1989. Gender and the urban household. In: *Women in the Third World* (L. Brydon & S. Chant, eds.), pp. 161-187, Aldershot: Edward Elgar.

COELHO, H. L. L., 1991. O que está em jogo no Caso Cytotec. *Ciência Hoje*, 13: 60-62.

COMINSKY, S., 1982. Childbirth and change: a Guatemalan study. In: *Ethnography of Fertility and Birth* (C. P. MacCormack, ed.), pp. 205-230, London: Academic Press.

DAVISON, C.; DAVEY SMITH, G. & FRANKEL, S., 1991. Lay epidemiology and the prevention paradox: the implications of coronary candidacy for health education. *Sociology of Health and Illness*, 13: 1-19.

DONABEDIAN, A., 1988. The quality of care: how can it be assessed. *Journal of the American Medical Association*, 260: 1743-1748.

ENKIN, M. & CHALMERS, I., 1982. *Effectiveness and Satisfaction in Antenatal Care*. London: Heinemann.

FIZPATRICK, R. & HOPKINS, A., 1983. Problems in the conceptual framework of patient satisfaction research: an empirical exploration. *Sociology of Health and Illness*, 5: 297-311.

FOSTER, G. M., 1987. On the origin of humoral medicine in Latin America. *Medical Anthropology Quarterly*, 1: 355-393.

_____ , 1988. The validating role of humoral theory in traditional spanish-american therapeutics. *American Ethnologist*, 15: 120-135.

FOSU, G. B., 1989. Access to health care in urban areas of developing societies. *Journal of Health and Social Behavior*, 30: 398-411.

GARCIA, J., 1982. Women's views of antenatal care. In: *Effectiveness and Satisfaction with Antenatal Care* (M. Enkin & I. Chalmers, eds.), pp. 81-91, London: Heineman.

HARDY, E. E. & OSIS, M. J. D., 1991. Mulher, Trabalho e Amamentação. Campinas: Unicamp.

KANJI, N.; KILIMA, P. & MUNISHI, G., 1991. *Quality of Primary Curative Care in Dar-Es-Salaam*. London: Urban Health Programme, London School of Hygiene and Tropical Medicine.

KEMPER, R. V., 1981. Obstacles and opportunities: household economics of tzintzuntzan migrants in Mexico City. *Urban Anthropology*, 10: 211-229.

KLEINMAN, A., 1978. Concepts and a model for the comparison of medical systems as cultural systems. *Social Science and Medicine*, 12: 85-93.

LAZARUS, E. S., 1990. Falling through the cracks: contradictions and barriers to care in a prenatal clinic. *Medical Anthropology*, 12: 269-287.

LIMA, M., FIGUEIRA, F. & EBRAHIM, G. J., 1990. Malnutrition among children of adolescent mothers in a squatter community of Recife, Brazil. *Journal of Tropical Pediatrics*, 36: 14-19.

LOGAN, M. H., 1975. Selected references on the hot-cold theory of disease. *Medical Anthropology Newsletter*, 6: 8-14.

LOGAN, K., 1981. Getting by with less: economic strategies of lower income households in Guadalajara. *Urban Anthropology*, 10: 231-246.

MacCORMACK, C. P., 1985. Lay concepts affecting utilization of family planning services in Jamaica. *Journal of Tropical Medicine and Hygiene*, 88: 281-285.

MEDEIROS, F. C., 1990. Efeito do abortamento provocado sobre a fertilidade futura da mulher. Paper given in the "Seminário sobre Aborto Provocado em Fortaleza: Riscos e Responsibilidade. Fortaleza: Universidade Federal do Ceará.

NASH, J. & SAFA, H., 1986. *Women and Change in Latin America*. Amherst, Mass: Bergin and Garvey.

NGOKWEY, N., 1989. On the specificity of healing functions: a study of diagnosis in three faith healing institutions in Feisa/Bahia. *Social Science and Medicine*, 29: 515-526.

NORRIS, W. P., 1988. Household survival in the face of poverty in Salvador, Brazil: towards an integrated model of household activities. *Urban Anthropology*, 17: 299-321.

PAISM (Programa de Assistência Integral à Saúde da Mulher), 1986. *Pré-Natal de Baixo Risco. Normas e Manuais Técnicos*. Brasília: Centro de Documentação do Ministério da Saúde.

PAPPAS, G., 1990. Some implications for the study of the doctor-patient interaction: power, structure, and agency in the works of Howard Waitzkin and Arthur Kleinman. *Social Science and Medicine*, 30: 199-204.

PEPPERALL, J. & GARNER, P., 1992. *The Maseru Hospital and Health Centre Outpatient Care Study: Research Findings and Planning Implications*. London: Urban Health Programme, London School of Hygiene and Tropical Medicine.

ROONEY, C., 1992. *Antenatal Care and Maternal Health: How Effective Is It? A Review of the Evidence*. WHO/MSM/92.4, Geneva: World Health Organization.

SCOTT-SAMUEL, A., 1980. Why don't they want our health services? *Lancet*, 23: 412-413.

UNICEF (United Nations Childrens Funds), 1989. The Invisible Adjustment: Poor Women and the Economic Crisis. Washington: The Americas and The Caribbean Regional Office. (Mimeo)

WEDDERBURN, M. & MOORE, M., 1990. Qualitative Assessment of Attitudes Affecting Childbirth Choices of Jamaican Women MotherCare. Project. Working Paper for USAID, London.

WILLIAMS, S. J. & CALNAN, M., 1991. Convergence and divergence: assessing criteria of consumer satisfaction across general practice, dental and hospital care settings. *Social Science and Medicine*, 33: 707-916.

WORLD BANK, 1991. Brazil: Women's Reproductive Health. Report No. 8215-BR, Washington.

YOUNG, A., 1981. The creation of medical knowledge: some problems in interpretation. *Social Science and Medicine*, 15B: 379-386.