

Concepts on Quality of Antenatal Care in Developing Countries: Results of an Evaluation in Argentina, Cuba, Saudi Arabia and Thailand.

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Abstract:

Introduction:

The results of a qualitative study carried out in four developing countries are presented. The study was conducted in the context of a randomised controlled trial to test the benefits of a new antenatal care protocol that reduced the number of visits to the doctor, rationalised the application of technology, and improved the provision of information to women in relation to the traditional protocol applied in each country.

Methodology:

Through focus groups discussions and in-depth interviews we were able to assess the concepts and expectations underlying women's evaluation of quality of care received in antenatal care clinics. 158 women participated in focus groups discussion in all countries.

Results:

Three areas are particularly addressed in this paper: a) concepts about pregnancy and healthcare, b) experience with health services and health providers, and c) opinions about Antenatal Care (ANC) program. In all three topics similarities were identified as well as particular opinions related to country specific social and cultural values. In general women have a positive view of the new ANC protocol, particularly regarding the information they receive. However, controversial issues emerged such as the reduction in the number of visits, particularly in Cuba where women are used to have 18 ANC visits in one pregnancy period.

Discussion:

Recommendations to improve ANC services performance are being proposed. Any country interested in the application of a new ANC protocol should regard the opinion and acceptability of women towards changes.

Keywords:

Antenatal care, quality of care, qualitative data

Introduction:

In 1995 the World Health Organization set up a randomized controlled trial to test the effectiveness and efficiency of a new antenatal care model (ACM) in four developing countries. The main characteristics of the new protocol were the reduction in the number of visits with an evidence-based set of contents, and the provision of accurate information to women to identify warning signs and encourage preventive behaviour. The trial was taken as a base to carry out a series of studies one of them being the study on quality of care. This study aimed particularly at understanding women's perceptions and views about reproduction, pregnancy, and health care and how these influence their evaluation of quality in both the control and experimental branches of the trial. The study of these issues can add to our understanding of the ways that changes in the organization of health services can influence demand and utilization of services by the population.

The issue of quality of care is particularly relevant because the trial involved substantive structural changes in all the four participating countries. The assessment of the quality of care is a complex matter since it involves objective and subjective means of measuring. Previous research has called attention to the need to understand what women regard as quality of care in family planning services [1] as well as other related types of care. For example, Vera [2] found that women in Santiago, Chile considered that quality of care meant, "being treated like a person, like a human being". They also raised issues about the conditions at health care facilities, the information provided, waiting times, courtesy of practitioners, and awareness of clients' needs, among others. In a study involving groups

of women from different ethnic origins, Handler [3] found that women's satisfaction with antenatal care was affected by their perceptions of whether staff treated them with respect and concern, and their experience of communication, being treated as individuals and technical competence in a pleasant and clean environment.

The aim of the present article is to describe women's opinions about the quality of antenatal care services in the four countries where the new model was implemented. These opinions are interpreted within a framework of culturally related views about pregnancy and health care in each country. The paper is based on information obtained from women involved in the trial, both in the experimental and the control arms, in four cities (Havana, Cuba; Khon Kaen, Thailand; Rosario, Argentina and Jeddah, Saudi Arabia). Information was obtained using qualitative techniques, namely focus group discussions and personal in-depth interviews.

Three aspects of antenatal care are discussed: a) the concepts and perceptions that women have about pregnancy and the needs that women may manifest during this period, b) the organizational characteristics of the health services where women receive antenatal care, and c) the provision of antenatal care itself. The first two topics are considered contextual in that they offer a framework of concepts about health/illness, pregnancy and health care which are relevant to understanding the third one, their opinion about the particular programme in which they were involved.

Theoretical framework:

The interpretation provided in this paper is based on the assumption that concepts expressed by women and providers are the product of a culturally defined understanding of the world, their lives and their experiences as health care users. Two issues are considered relevant within the theoretical framework that we describe next. The first is the identification of women's medical orientations which are characteristic of each culture DeSantis [4]. For the present study we regard these differences as country-specific. The second is how women use their cultural orientations in order to evaluate the provision of health care, among them antenatal services, and how they perceive the quality of these services. These orientations are constantly shaped by experience and by interaction with family and community members, as well as, in the health setting, by contact with health providers. Doctors and women may have different views about pregnancy. While it is common that doctors have a medicalised view of pregnancy and regard it in clinical terms, women are likely to see pregnancy without a medicalised view and regard it as a condition linked to their social role in the community or the family. In the relationship between doctors and patients, different views about health and disease are constantly interacting. While providers' medical culture can exert dominance over women's culture in the clinical encounters, the capacity of the latter to respond according to their culturally defined framework of explanations can also shape their response outside the clinical environment.

According to Kleinman [5] societies construct explanations to which cultural meanings are attached. Explanations can be constructed to understand and broad social phenomena (e.g. religion) as well as specific issues of daily life (e.g. health care). In the health arena, doctors, for example, hold a concept of disease and health, which stems from a cultural

construction particularly related to the specialised culture of medicine. Furthermore culture is not only a means of representing disease, but is essential to its very constitution as a human reality. Complex human phenomena are framed as “disease”, and by this means become the objects of medical practices. Disease has its ontological grounding in the order of meaning and human understanding Good [6]. Thus, disease is not an entity but a means to explain a specific area of reality. Eliciting and providing accounts of explanatory models of illness can provide appropriate mechanisms of analyzing patients’ understanding of their condition. It can also serve as an entry to teaching clinicians to elicit the “native’s point of view”, meaning the way their patients understand their own ill/health conditions. These cultural constructions can only be fully understood by examining the specific context in which they are employed, since this usually has a major influence upon them [7]. For example, the ways in which lay and medical understandings interact in the clinical consultation are influenced not only by the physical context (such as the hospital ward, or doctor’s office) but also by the social class, ethnic background, gender and age of the two parties involved. The power invested in the clinician by virtue of his/her background and training may allow him/her to mould the patient’s explanations to make them fit into the medical model of disease, rather than allowing the patient’s own perspective of illness to emerge. Thus, although women’s lay explanatory model in each culture (or country) can contain common elements for the interpretation of pregnancy experience, some factors such as religion can add specific elements to its constitution. Furthermore interaction with the health care system and its providers may provide differential traits in each cultural setting.

This asymmetric interaction between doctors and women has been addressed by Graham and Oakley [8] who have pointed out some of the fundamental differences between doctors' and mothers' perspectives on pregnancy, particularly whether this is a 'natural' or 'medical' process. Conflictive approaches about health and disease between lay women and providers of health services have also been identified in developing countries [9]. This conflict is part of the wider differences in perspective inherent in all doctor-patient interactions. The medical view of pregnancy abstracts it from the rest of the woman's life experience and treats it as an isolated medical event. The patient enters medical care at onset of pregnancy, and leaves medical care after giving birth. For the mother, on the other hand, it is integrated with other aspects of her life, for she acquires (with the first birth) a new social role, as well as profound changes in her financial situation, marital status, housing situation and personal relationships. There may also be differences in how she and the obstetrician assess the quality of the childbearing experience, what they identify as a successful outcome, and how they decide who should control the technique and pace of the birth itself. Thus there is an inherent clash between the obstetricians-clinicians (usually male) who have a specialized knowledge of childbirth - and the mothers, whose knowledge stems not primarily from medical science but rather from a woman's capacity to sense and respond to the sensations of her body [6].

Cultural constructions to understand ill/health can be correlated with the concept of quality of care in the reproductive health field. According to Bruce [1] quality of care should be considered within a comprehensive framework used to assess the provision of reproductive health services. The Bruce framework defines quality of care based on the following six

elements: choice of methods, provider-client information exchange, technical competence, interpersonal relations, mechanisms to encourage continuity and appropriate constellation of services. From this set of elements, two were selected to evaluate quality of antenatal care in the present project with one addition. These elements are: provider-client information and interpersonal relations. The addition is the role of new procedures and technology in primary health care settings. They were selected as they represent the basis for the modifications attempted by the trial and because they also represent the main traits to identify the way women evaluate quality of care.

Methods

The complexity of measuring and understanding the subjective dimension of quality of care required the gathering of information by applying both qualitative (focus group discussions and in-depth interviews) and quantitative methodologies (survey of users). The focus group discussions with women were guided by a standardised and detailed list of issues [10]. These general topics about health care provision and prenatal programmes were addressed in order to gain initial understanding of the way health care is perceived in each specific cultural context. Special attention was given to the composition of the groups: women of different ages, parities and social conditions were included in each discussion (Table 1). All women participating in focus groups were pregnant and the criteria for selecting them was after having completed two ANC visits either in the traditional or modified protocol. Only one woman in Argentina was self-invited without participating in the trial. She was the mother of one of the women originally invited to the discussion. All focus groups

discussions were carried out during the time when the trial was taking place. It is worth noting that the way focus groups were run varied between countries according to the participation of women, the places available to carry out sessions, and to the respect of cultural norms. The way that women took part in the groups differed between the four countries. Women's involvement was very intense in Cuba and Argentina. Particularly in Cuba, women were very talkative and always wanting to provide all the information possible, even beyond the scope of the questions. In Thailand and Saudi Arabia women participated in a less intense way. Focus groups were carried out away from the health centres, in libraries, parks or women's houses, except in Saudi Arabia. In this country, all the focus groups took place within the health centres in private sessions because a woman needed her husband's permission to leave the health centre.

The methodology was designed also to deal with language issues. The original set of questions for the focus groups was written in Spanish. They were initially tested in the field in Cuba and Argentina. Then a translation was made into Thai and Arabic and adapted to Cuban and Argentinian Spanish in order to apply as homogeneous as possible a set of questions. Tape recording and notes from focus groups in Thailand and Saudi Arabia were transferred to computer files and translated into English. Translation was made by a person chosen by the local coordinator as fluent in both languages. Recordings from Cuba and Argentina were transferred to computer files in Spanish. The final translation to English of these two latter countries was made by the article's first author. Multiple translations opened the risk of misinterpretation. To avoid this effect in the writing of this article, all local researchers were asked to give their opinion about the selection of

quotations and to check that the meanings in the English translation were the same as in the original language.

After completing the focus groups, in-depth interviews were carried out in some of the participating countries, in order to further explore women's expectations and experiences.

Women were invited to respond to an in-depth interview when the researcher realised that a focus group participant was willing to keep on talking about antenatal care, or when she seemed to feel uncomfortable participating in a collective discussion. The present paper shows only information gathered in focus group discussions. Both focus groups and interviews were conducted by social/health researchers with experience in the application of these methodologies. Meetings took place in a non-clinical environment, and researchers made very clear to participants that all the information provided would be kept confidential and would in no way influence the care received at the health facility. The development of rapport was crucial to avoid the effects of courtesy bias and professional authority, especially present in developing countries. Following a basic premise of qualitative research, we avoided establishing an *a-priori* defined sample size for the focus group discussions. Instead, researchers established the final number of encounters based on the 'theoretical saturation' point [11]. It is important to say that some other practical aspects also influenced the definition of the final number of focus groups such as the already mentioned difficulties of Saudi women to move without the spouse's authorisation or the problems that women in Khon Kaen faced to find timely transportation. Thus, the number of focus groups and participants differ among countries.

Information in computer files was later systematised using Ethnograph. Generic and specific codes were defined by researchers in each country to identify the wide variety of topics that women mentioned as relevant to the construction of explanations. Pieces of information were selected to illustrate women's views. In each country the basic themes of culturally-related interpretations of illness, experiences with health-care provision, experience of antenatal care and other relevant features were explored. The assessment of antenatal care experience is considered in the present paper as the final goal of our interpretation.

Results

Table 1 shows information about women participating in focus groups in all countries. All together 158 women participated in discussions. Women had varied socioeconomic backgrounds. In Cuba women lived in the surroundings of the clinics, most of them had a high level of literacy and were working in offices, schools and hospitals. In Thailand women were living in the countryside near Khon Kaen. Most of them were housewives and their husbands worked in the fields, or had different low skilled occupations. Argentinian women lived in low class neighbourhoods and their husbands were industrial workers, mechanics and other low skilled activities. Most Argentinian women were housewives and some of them worked as waitresses or teachers. Saudi women were married to technicians, businessmen, or professionals, they belonged to middle class groups being most of them housewives.

a) Concepts about pregnancy and healthcare

Cuban women identified pregnancy as a normal experience, which should not be regarded as a disease or a pathological state. Even though women consider pregnancy to be a normal period in their life cycle, they agree that their bodies, feelings and behaviour can undergo several changes and that a woman's age is an important factor that can modify the way these changes are experienced. For Cuban women, the best age to be pregnant is between 20 to 30. From their point of view, if women are younger than that they are immature not only physiologically but also psychologically. On the other hand they expressed the view that young women are physically better able to go through pregnancy than older women. According to their view, changes during pregnancy demand an understanding reaction from those around them, especially from their partners and relatives. As one woman said: "There are many people supporting me now, but my husband is fundamental because he is the father. I want him to love the baby like he loves me. I want him to feel the same sensations I am feeling". The need for understanding also includes health personnel. Some women report conflicting feelings of happiness for being the carriers of a new life while having to go through pregnancy in conditions which are not ideal for them, sometimes because their partner is not around or because they do not have enough money to support the new child.

Women identified diseases associated with pregnancy. Particularly important for them are "vaginal infections provoked by bacteria or viruses" (focus group). Some of them were able to mention the names of the infectious agents and the ways of transmission. This information has clearly been taken from providers and the handling of concepts and the

description of processes is reasonably accurate in technical terms. As one woman put it, “Current infections during pregnancy are normally provoked by vaginal parasites. Doctors test for them. Vaginal discharge exudates could be positive or negative if women have or haven't got monilia, trichomonas, and chlamydia or itching and secretion” (focus group).

In Thailand, the commonly expressed opinion of women participating in focus groups and personal interviews was that pregnancy is a special period in the lifecycle of a woman which should happen when women are around 20 years old. As a woman stated, “at 20 you are an adult and can take responsibility for the baby's care”. Younger ages are not good since women are not physiologically and emotionally ready to have children. Older years produce risks for the health of the woman and the child. Pregnancy makes women change a variety of health-related behaviours including types of food consumed, exercise and smoking. For example, there is a specific culturally defined prohibition on eating certain foods during pregnancy though not all women follow this cultural rule. One woman said that: “I don't eat eggs as I'm afraid the baby will have a bad smell” (focus group). Pregnancy also changes women's moods and personality, making women more irritable and moody. They also stress the need for special emotional care, particularly from their husbands and mothers. They see the role of partners as very important, though most women referred to difficulties in obtaining men's attention because of various reasons, some related to the personal relationship with the husband and some related to the men's working activities. Another culturally defined custom referred to by women was that men should stop working in order to be near the woman from the final stages of pregnancy until some days after the delivery, but this is not followed by all men. Women's descriptions of

problems during pregnancy mainly referred to the symptoms they experience and not to particular diseases. None of them referred to pathological agents as the cause of these symptoms. The most common symptoms mentioned were vaginal itching, white discharge, frequent urination, "morning sickness", headaches and fever.

The framework of concepts about pregnancy and care among Saudi Arabian women that participated in focus group discussions can be characterised as composed by both religious and experiential elements. Of the first type are basic concepts such as the general origin of disease or general health conditions. Women can identify a variety of symptoms like fatigue, dizziness, and tiredness all related to the fate human beings have to experience as a consequence of God's will. The main human expression of disease is pain and suffering. Human beings are always at risk of contracting a disease and suffering pain. However disease is not seen as a punishment from God but as a test for human beings to know how much they can bear in life. The psychological way to confront disease and pain is through humbleness and acceptance that these things come from God. Since personal health is in the hands of God, the issue of the best age to be pregnant is not as important as it is in other countries, and this is expressed by the lack of agreement about the age range within which it is better to have children. In some focus groups the preference was around 18-19 years old as the best age, but in others the period was wider (20-35 years old). Health is seen as a psychological, physical and spiritual condition of wellbeing. Human beings should also thank God for keeping them healthy. When a person is healthy, they are full of energy provided by God. A symbolic way to represent this was mentioned by several informants. They refer to it as "a crown on a head of the healthy people." (focus group) When this

crowns disappear the person is at risk of getting sick. Health conditions change when women get pregnant. Informants referred to a wide variety of conditions (both diseases and symptoms) that appear during this period, the most important being: anemia, infections, general weakness, vaginal bleeding, fever, hemorrhoids, and back pain. They also referred to diseases such as cancer and diabetes. The majority of women focused their attention on physical conditions but some of them also mentioned psychological conditions.

In Argentina, one outstanding feature of these women is the early ages at which they start their reproductive life and the high level of parity. Women having 5 children or more (17% of the total) had an average age of 31.8 years. Educational level was also low and even illiterate women participated in the groups. Women's discourse about health and illness is almost empty of religious references. Their view about pregnancy is a natural one and the way they try to deal with problems during this period is experiential. For example, miscarriage was mentioned as a common experience among women but they don't refer to it in a painful way, as this is an event that can happen during pregnancy. On the other hand, a feeling of happiness and realisation of motherhood surround the experience of pregnancy. Age is according to women an important factor in experiencing a safe pregnancy. Women think that after the mid 20s, pregnancy is a more difficult experience. According to their view, every pregnancy is different but special care is always needed. Women realise that their daily activities in the household or at work may need to be reduced, but many of them report that they don't necessarily follow these restrictions. In practical terms activities are not limited because they have no choice. However, pregnancy changes the mood of women. In their opinion pregnancy provokes anxiety, sadness, explosive mood

and acute sensitivity. In this area women agree that they need more understanding from the family but particularly from their partners. Pregnancy requires special attention but is not always possible to have it. Family support and the mother, when she is present, plays an important role in the care of other children and household duties. Older children, particularly girls, also help at home.

Concepts about health, disease and pregnancy vary between the countries in this study. In some cases the link between the cultural framework of general social values and these concepts is clear as in Saudi Arabia or Thailand but this is not the case in Argentina and Cuba where concepts had a more experiential or technical influence. In all four countries, pregnancy is seen as a special moment in the woman's lifecycle where a specific type of care is needed, but it is not seen as a natural phenomenon in all countries. In the case of Saudi Arabia it is particularly interesting to understand how religious values can shape the concepts and practices of women and men. This issue leads to the construction of symbolism to show the presence of God in all human behaviour. In practice, Saudi culture gives great importance to pregnancy, delivery and child bearing [12] which makes health authorities and providers put particular emphasis to antenatal care as a means of achieving the best possible results. Cuba's cultural framework - mix of Catholic and African religious values - has been wrapped up by the technical information provided by care-givers. This allows women to use a very technical, sophisticated vocabulary regarding pregnancy. In Cuba antenatal care is also seen as a priority by health authorities which have put great emphasis on the achievement of some of the best maternal and perinatal mortality outcomes in the world. Regardless of the framework of cultural values underlying women's thinking

in each society, the view that younger ages are better for pregnancy is present across countries. Differences may be explained by the different social roles assigned to women at different ages.

b) Experience with health services and health providers

Cuban women have strong opinions about the type of care that they prefer to receive. Underlying these opinions is the idea that modern and technically complex care is the care they really trust. They show a strong preference for being attended in the hospital by a specialist doctor rather than in the health centre by a family doctor. Women reported differences in the facilities and equipment available at the health centre. Distance from their homes is not important if they can get care in a hospital. They prefer to travel far from their homes to be sure that they will receive the attention they need. Currently, in the area of Havana covered by this study, the availability of primary health centres is high and women do not have to travel long distances. Women complain that equipment frequently does not work at health centres. This is the case with scales, thermometers and sphygmomanometers. Women have strong views about their preferences for specialist doctors but no preference about the gender of the provider. They state that family doctors only handle general information about pregnancy, and some women expressed their doubt about the ability of general practitioners to look after them. In their view, general practitioners are exposed to a wide variety of demands from the population and they have to give at least a superficial response to all of them, having very little chance to go in depth with every patient. Some women also pointed out that family doctors are not well trained to deal with their problems.

On the other hand, specialists have enough information and are trained to respond to any query that women may have. Thus, practically all women prefer to visit the specialist.

Thai women do not express a strong preference for modernity. Traditions are very important in Thai culture but current economic and social reality is making people change their views about the importance of sticking to traditions in the context of modernity. For example, this was expressed by the preference for hospitals over primary health centres which is seen as a benefit of modernity contrasting with the preference for generalists, nurses and midwives over specialists. Women argue that they feel more secure attending the hospital because all the equipment is available there. Although the primary health centres are not in bad condition, hospitals have more resources, better trained personnel and are more comfortable and clean. In case of emergency the hospital is better prepared to respond. Following their rationale, Thai women have strong preferences for trained nurses and women providers. Although they recognise that doctors have more information than other staff, they prefer nurses, particularly midwives, because of their experience. Women of course do not disregard doctors' care. Some women argue that the fact that midwives are themselves mothers and had experienced pregnancy makes them more capable of understanding women's needs at all levels, not only physiologically but also emotionally. Midwives have "special knowledge about mother-child care" (focus group). Thus, there is a division between those women who prefer to be cared for by the doctor because of their "higher" knowledge and those who prefer the midwife because of their "special" knowledge. Gender appears as a very important issue. Most women state a preference for female carers. It is not just that they feel that women can understand better the experience

of pregnancy, both the physiological and emotional aspects, modesty also plays a role here. Some women expressed the view that they do not feel happy exposing their bodies to male doctors. They feel specially uncomfortable when the doctor has to do a vaginal examination.

Saudi women express a clear preference for being seen by female doctors in antenatal care. They say they feel more comfortable with them in the physical examinations and when they ask questions about pregnancy, breastfeeding and so on. However male doctors are also accepted as long as a female nurse is present in the consultation. Regarding the type of provider, the majority of women think that the skills of doctors and nurses should be combined to provide health care services. Women say that doctors are better fitted to provide technical information in response to the questions they pose, while nurses are much better at comforting women in psychological distress or reassuring them about the anxieties they have during pregnancy. There is no consensus about waiting times. For a few women, waiting times are just right and cause no problems; the majority of women however refer to excessive waiting times and they particularly identify areas and services, which make them wait longer. Some of them say that the health centres are frequently too crowded and that they have to wait 5 or 6 hours. They often have to wait when they go for blood tests to the labor to dental care. Some of them say that this problem is caused by the way the services are organised (the appointment system, the number of staff in the health centres, etc.) and others say that they frequently have to confront a bureaucratic attitude among staff. Conditions at the health centres are not highly regarded by some women. Although the majority expressed a high level of satisfaction, some women had critical opinions. For

example they say that the availability of drugs and vitamins is not always good. Sometimes they have to go to the private pharmacy to buy prescriptions. Women also regard health centres as clean although some of them agree that toilets could be cleaner than they are. Some women say that the reception area could also be improved in its performance. Some complaints about providers' performance were registered. A woman mentioned giving responsibilities to staff who do not have appropriate training. For example, an administrative clerk provided a vaccine to her child provoking a swelling in his leg.

Health care services in Argentina, both in municipal and state-level institutions, are organised to refer patients from primary to secondary and tertiary levels. In theory this referral system works systematically but in practice there are many ways to get around it. In general women think that attending a hospital both for antenatal care and delivery is the best choice. This opinion is based on the fact that hospitals have all types of technology available while primary health centres lack the minimum resources. A few disadvantages are identified in hospital among them waiting times and geographical accessibility. Neither of these two disadvantages represents a major obstacle for women. If a woman is given the chance to choose they will look always for hospital care. However those women that receive antenatal care at health centres do not necessarily complain about the services received as they regard care in those settings as good based on the familiar, courteous and personalised care that they receive. Opinions about health personnel are generally good. For women in Rosario trust is the main issue in having a good relationship with staff and feeling happy and secure with health care. Trust covers a wider range of things; for example

trust in the technical capacity of doctors and nurses, trust in the way doctors handle personal, private information, trust in the way doctors behave in the clinical encounter, etc. Nonetheless, women referred to other types of behaviour. At one end they identified doctors that were rude in the clinical check-ups; other doctors gave inappropriate answers to questions; and some others induced women to pay bribes to other staff or to themselves to release information that women were expecting. At the other end, women referred to groups of staff (mainly doctors) who were giving money from their own pockets to buy services such as lab tests in private institutions when the public hospital was not able to provide them and women could not afford them. There was no consensus on the issue of the type of provider that women preferred. Those who preferred male doctors argued that men are more careful in the way they proceed clinically. On the other hand, those who preferred women argued that most female doctors have had children themselves so they know about the physical and psychological needs of pregnant women. One other element that makes women prefer female doctors, although not a very common one, was the issue of shyness. These groups of women prefer to show their naked body to a woman than to a man. Despite the fact that there were references to opposition from husbands to women seeing male doctors, informantssaidthattheyhadthefinaldecisiononthisissue.

Evaluating women's opinions along the axis of modernity vs. tradition in health care can provide interesting interpretations about the role of health services, particularly antenatal care in each country. In Argentina and Saudi Arabia modernity meant the use of the most technologically sophisticated health care available and was highly regarded. This is shown particularly in the preference for the use of ultrasound. The high demand of this type of

technology may be linked to the capacity of the health services themselves promote such preferences but also to the way this procedure can make women feel reassured about the baby's health. Research supports the view that women find ultrasound attractive and reassuring [13][14][15]). Cuban and Thai women do not show such a strong preference for ultrasound but Cuban women's high regard for modern medicine is shown by their preference for care from specialists doctors. The role of family doctors is called into question when women do not consider them to have and to provide solid and accurate information. Only Thai women showed a particular preference for midwives as practitioners who are culturally linked to the way women understand pregnancy. Saudi women strongly preferred female providers, perhaps because of the way that Saudi society is organised separating men from women in all public activities. This also may explain why midwives are preferred as providers of antenatal and delivery care. According to Baldo [16] in rural areas in Saudi Arabia women have a stronger preference for female traditional birth attendants. However, receiving care from a male doctor is possible as long as the social rule of having a female nurse in the consultation room is followed.

c) Opinions about the ANC programme.

There is a strong preference among Cuban women for visiting the doctor as frequently as possible, whether family doctor or specialist. Women participating in the modified schedule do not consider the reduction of visits, as a positive since they feel that pregnancy is a special period in their life cycle therefore requiring very close care. Women also experience a lot of social pressure, inside and outside the household, to attend the clinic as often as

possible. Mothers and mothers-in-law particularly exert pressure, as they belong to a generation for which the Cuban health system played an important role in creating demand at a time when it had the necessary means to cope with it. Women expressed a high level of satisfaction about the information they received during pregnancy. They might be lacking information on how to deal with the emotional and psychological changes occurring during pregnancy. Furthermore, they are able to differentiate the type of information given by family doctors from that given by the specialist, that they regard very highly. As mentioned before, women are very active in asking all type of questions to doctors, but doctors tend to provide only the minimum information to avoid women getting anxious about issues that they believe can only remotely affect them. Privacy is another sensitive topic addressed by Cuban women. A general view is that rooms in these clinics lack basic conditions for privacy. "In my unit there is no scales nor a blanket to protect the patient's privacy and the general practitioner (a woman) told me that in my visit to the specialist (a man) I have to take with me a piece of cloth to cover my body, otherwise the doctor (...) will not take his eyes away from you. The generalist told me that the specialist is not guilty but I, myself I provoke his curiosity by not carrying my own piece of cloth". This quotation also shows evidence of the scarcity of resources.

Regarding the number of ante-natal care visits during pregnancy Thai women state that once a month on average is adequate. However, there is no consensus among women on how to evaluate the new model against the traditional one. Those who participate in the traditional programmes say that they feel fine with the current number of visits and express insecurity with the idea of reducing the number of visits. Some of the women who

participated in the new programme feel that the reduction of visits did not affect them as at every visit they were checked thoroughly by the doctors. However some of them expressed anxiety with only four visits. Experience with the new programme seems to mark an important distinction between women. Those who did not participate in the experimental programme feel more anxious about the reduction. The information received from providers is an important issue for women. The majority feels that they receive enough information from providers but some topics should be addressed more in depth. A topic that they would like to receive more information about is nutrition and the type of food they can and can't eat. Information provided to Thai women is normally considered good in terms of amount and quality. Women acknowledge the capacity of nurses to be patient with them and to take their time to make them fully understand the message. Courtesy is a strong value in Thai culture and antenatal care is an environment where courtesy is highly expressed. Women say that in their experience the majority of times they are treated courteously. However, some exceptions appeared mainly related to administrative staff.

In Saudi Arabia, there is a clear division in women's opinions regarding the number of visits during antenatal care. For some of them if the pregnancy is a normal one the number of visits in the new protocol is acceptable. This feeling is strengthened by the possibility making additional visits to the health centres at any time they feel they need to. Some other women think that the number of visits in the modified protocol is not enough and that 1 or 2 more would be better, particularly in the first three months of pregnancy. They think that between the first and second visit there should be another one. One woman said that she feels the need for an ultrasound test earlier in the pregnancy to feel secure about the

position of the baby. Information provided by doctors and nurses is considered good but there is a lot room for improvement. Some women would like to be able to ask more questions than they normally do, however, this is not always possible first because they don't feel confident enough to ask, and second because doctors do not necessarily respond to their questions. Communication with male doctors is difficult because women feel embarrassed to ask them about their worries. Some women ask the nurse to ask the doctor her questions. Women say that they normally get information from doctors in the consultations but very rarely outside the office. They also say that quite frequently, information is provided by nurses and not by doctors. Saudi women in general feel that doctors and nurses are very much aware about their health conditions and their pregnancy. This feeling is generated by the fact that staff visits them even at home when the date of the appointment is close. Women also report that they are treated with respect and courtesy in the consultation. Some women said that they like it when the doctor is a religious person.

Argentinean women varied in their assessment of the information they receive from health providers. At first most of them said they were satisfied with the information they got but when questioned about specific issues they did not necessarily report complete satisfaction. Some topics are more fully explained by staff than others. Nutrition, weight gain, and family planning techniques for example belong to the former group. Several references were made about the lack of information on new tests such as the urine test that uses a paper strip to identify infections. Most women said that they didn't know the purpose of it. There were practically no comments about the need for psychological advice. Some women say that they have found inconsistencies in the way doctors provide information:

“I feel afraid of getting fat. I gained 100 grams beyond the 1 kilo I was supposed to gain and the doctor almost kills me, but he is a kind person” “There are doctors that don’t want you to get very fat. They say 10 (kilos) during the whole period and that’s all”. “There are others that don’t care too much about it. I had one that told me, keep eating well, after a month in which I gained three kilos”
(focus group)

The use of new technology in antenatal care has been incorporated into women’s cultural values as positive. One major issue here is the way they trust ultrasound and the benefits they find in its use. Demand for the procedure is high. Ultrasound seems to reduce anxiety, provide new information and psychological security and check unforeseen changes in the mother and the baby. Women argue that ultrasound makes them confident about the baby’s health. Women deny that knowing the baby’s sex is the most important reason for wanting ultrasound. The reduction in the number of antenatal visits is not necessarily seen as positive. In the traditional programme women were used to having between 9 and 11 visits in pregnancy. In their opinion the number of visits is not a major issue for having a safe pregnancy as long as care is of good quality. However, they would not like to see the number of visits reduced. Women in the modified programme thought that a reduced number of visits does not create problems for them since doctors are very careful in complying with the new procedures. In their opinion, however, they would prefer to have more. Some of them said that, in practice, most women in the modified programme have more than 5 visits during the period anyway.

Preferences expressed regarding the number of visits show a wide variation among countries, ranging from 7 to 8 in Thailand to 18 in Cuba. Depending on the country, this range can be explained by the influence of several factors. In particular the health care model in Cuba has promoted the surveillance of pregnant women as priority policy. This preference is shared by the population that regards this amount of visits as normal and necessary. Compared to the rest of the countries the Cuban figure is outstandingly high. In Saudi Arabia, since women always have to be accompanied by their husband for a consultation, an increase in the number of visits may lead to difficulties due to their husbands' time constraints but a decrease is seen in a sympathetic way. Other observers have pointed out the same issue [17] reporting that women consider no more than 10 visits appropriate. Most women in all four countries considered that the information they received from providers was appropriate and reported high satisfaction. However, in all of them, observations about problems with the provision of information appeared. In Argentina and Thailand women referred problems regarding technical information, Cuban women referred to the lack of an affective/psychological component in the information provided to them, while in Saudi Arabia the issue of male provider/female user interaction was referred as problematic. Although satisfaction was generally manifested among women regarding the treatment they received from providers, some criticisms were made. In Saudi Arabia and Thailand lack of the expected level of courtesy was the issue while in Argentina there were some complaints about explicitly rude treatment. In Cuba the practice of scolding patients by practitioners is taken in a positive way as an example of the concern felt for the woman.

Discussion:

According to our conceptual framework, women's understanding of their pregnancy condition can be shaped by different circumstances related to specific cultural settings. These circumstances can be present in different environments such as the household, the community, the school and others. Nonetheless it is assumed that contact with health care institutions, and particularly with health providers, are paramount in the shaping of women's views. If this statement is true, then clinical interventions can be used to improve clinical outcomes, and also efficiency and quality of care, particularly those aspects addressed by women and described in this report. It is important that changes in clinical care should be sensitive to women's particular needs in order to move in the right direction when changes are made.

Taking into consideration the opinion of women and practitioners, it is possible to conclude that the concept of quality of care varies according to cultural settings. Several aspects can be considered by women to evaluate quality since the subjective dimension of quality is constructed according to cultural values. In Cuba the reduction of visits may be perceived as a reduction in quality while in Argentina the lack of information would be a more relevant topic to be considered related to quality. However, there are some aspects that are present in each country and that should be further discussed. Three aspects are considered to catch the essence of the problematic and are addressed next.

The behaviour of practitioners is an important aspect that was raised by the participants of the study. Although there was no clear preference about the sex of doctors, the idea that

men can be potentially intrusive in the intimacy of women was present in all countries, but expressed in different ways. In general, male doctors are regarded as professional people, able to separate their emotions from their rational, technical performance. However, while in Cuba women showed no apparent shyness towards male doctors, nurses were very clear in their messages to warn patients about the possibility of doctors intruding their intimacy. The expression of this phenomenon in Saudi Arabia was clearer as the cultural frame is quite explicit, subjecting male doctors to be supervised by women when they perform in private environments.

The amount of resources and the technology involved is another aspect to be discussed. In Argentina, the lack of sophisticated technologies such as ultrasound scans at the primary care unit, provoked a great deal of dissatisfaction among women. As this technology is not widely available in rest of the countries, women did not even mention the lack of this resource. Technology is a powerful resource not only because of its ability to help the diagnostic capacity of health care services and practitioners but also because its presence in the unit creates among patients the sense that they are treated according to the highest standards of quality.

The last topic is the role of information provided to women. As results show there is also a country variation regarding this issue, not only on the amount but also in the type of information provided. Therefore while Cuban women receive a good deal of information and reflect very much the technical language of doctors and nurses when they speak, they complain about the lack of information regarding the psycho-social side of care. Cuban

women have a higher level of education and they are more capable to use information to have a better understanding of their condition but not necessarily to question doctors' point of view. In Thailand and Saudi Arabia information received by health personnel is not questioned, but is interpreted according to traditional cultural values.

This relativism however should have its limits since, regardless their opinion, no women should be treated without respect to their rights as patients. Quality then becomes a concept that can not be considered country -relative. On the contrary, the definition of norms that have to be accomplished have to be understood in the two dimensions proposed by Donabedian [18] the technical and the interpersonal, and has to be evaluated in these two dimensions in order to grasp its whole content. Also, both dimensions are subdivided in specific areas. The interpersonal one at least can be subdivided, as shown in this paper, in communication, courtesy/respect, understanding of cultural values, expectations and satisfaction levels about care, etc. Therefore, policy should not only have to make sure that practitioners and health units provide the best possible care according to technical standards and available resources but that they have to be also very keen to protect women's reproductive rights according to international and national standards. On the other side, policy has also to guarantee that women receive the information they need both in general and specific aspects of care and that they use this information to protect their rights when needed. Information should help to empower women.

Finally, findings presented in this paper have to lead to health authorities and those responsible for the provision of antenatal care services in each country to take into

consideration the role of women's opinions and preferences in order to make sure that new programs are sustainable. There are basic issues of general antenatal services that can be improved but there are also some specific to the introduction of modified protocols of care. One general aspect is that any change in the provision of services takes time for everybody to understand even though these changes have a very sensible, scientific base. The time frame may vary between countries. Cultural and social contexts evidently shape the way that programs are applied especially when programs tend to standardize health services to a common norm. Reducing the number of antenatal visits to four in Cuba is a quite different story from introducing such a pattern of care in Thailand or Saudi Arabia. Preferences expressed by women have to be taken into consideration particularly those in which all women agree. This does not mean that personal preferences may not be addressed but responses have to be different in every case. One of the issues that women insisted on in all four countries for example was the issue of information given by providers. This represents a major topic that is located in the nucleus of the relationship between personnel and women. Reviews of women's experiences of maternity care indicate that information and communication are central issues Reid and Garcia [15] and that they have to be improved according to the cultural setting.

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TABLES

Table1.Characteristicsofwomenparticipatinginfocusgroupsinallcountries

Country	NumberofWomen	AverageAge	Meanno.ofchildren
Thailand	45	24.1	1.5
Argentina	72	25.4	2.2
Cuba	33	26.7	0.5
SaudiArabia	14	28.2	3.3

Table 2. Concepts about pregnancy and care

Country	Cultural framework	Knowledge about pregnancy	Best age for pregnancy
Saudi Arabia	Strong Muslim religious values	Based on religious values	Between 18 -19 years old
Argentina	Blend of pragmatic and Catholic religious values	Empirically based on personal or family experiences	Between 20 -25 years old
Cuba	Dominance of pragmatic values	Reproducing technical discourse of health providers	Around 25 years old
Thailand	Strong traditional values	Based on traditional values	Around 20 years old

Table3.Experienceswithhealthservicesandhealthproviders.

Country	ModernityvsTradition inhealthcare	Typeofprovider	Genderofprovider
Saudi Arabia	Highvalueofmodernity	Preference for family practitioners	Preference for female providers
Argentina	Highvalueofmodernity	No particular preference between GP's and specialists	No particular preference
Cuba	Absolute value of modernity	Strong preference for specialists	No particular preference
Thailand	Balanced value between modernityandtraditional	No particular preference but high value of traditionalmidwives	Preference for female providers

Table 4. Preferences about antenatal care

Country	Preferred Number of visits	Observations about information received from providers	Observations about treatment received
Saudi Arabia	More visits in the initial stages of pregnancy. 10 to 12 visits total.	Difficulties to ask questions and obtain information from male doctors	High. Complaints about lack of courtesy by doctors.
Argentina	No specific preferences. 9 to 11 visits during pregnancy seems OK.	Contradictory versions on nutritional information	High. Complaints about rudeness in treatment
Cuba	1 visit every 15 days. Around 18 during pregnancy period.	Lack of information on the effective areas	High. Acceptance of scolding practices by doctors
Thailand	No specific preferences. 7 to 8 visits during pregnancy seems OK	Lack of information about nutrition.	High. Complaints about lack of courtesy by doctors.

COMPETING INTERESTS

- Have you received reimbursements, fees, funding, or salary from an organization that may in any way gain or lose financially from the publication of this paper in the past five years? **NO**
- Have you held any stocks or shares in an organization that may in any way gain or lose financially from the publication of this paper? **NO**
- Do you have any other financial competing interests? **NO**
- Are there any non-financial competing interests you would like to declare in relation to this paper? **NO**

AUTHORS' CONTRIBUTIONS

Author 1 and 6 participated in the design of the study and coordinated it. Author 1 elaborated the different versions of the manuscript. Author 7 was the PI of the WHO randomized trial, participated in this study design and implementation of the study, and made essential contributions to the different versions of the manuscript. Author 2, 4, 5 and 6 coordinated project implementation in each country. The rest of the authors participated in the WHO randomized trial and provided input to this specific component of the study. All authors read and approved the manuscript.

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