Radiologist-patient relation in obstetric ultrasound: a bioethical approach

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Abstract

This study aimed at knowing the radiologist - patient relationship during obstetric ultrasound examinations from women and radiologist's points of view with focus on principialism. This qualitative, exploratory, and transversal approach, 10 pregnant women and 10 radiologists were interviewed, through semi-structured, recorded and literal transcribe interviews. The methodological guidelines of the Collective Subject Discourse (CSD) were used for selection of the central ideas and key phrases. We identified the following social representations from pregnant women: "information about the fetus," "delivery day", "guidance on the exam," "negative expectation overcome," "kindness," "be nice", "low expectations" and "attention." And, from radiologists: "to reassure the patient," "managing situations", "be nice" and "attention, respect, trust and affection" to the patient. It was found that in the radiologist-patient-relationship, specific technical knowledge, the human relationship, and care for pregnant women are essential for human life and bioethical principles valuation.

Key words: Doctor-patient relation. Radiology. Ultrasonography. Obstetrics. Bioethics.

Resumo

Relação radiologista-paciente no exame ultrassonográfico obstétrico sob o enfoque bioético

Este trabalho objetivou conhecer a relação radiologista-paciente durante os exames de ultrassonografia obstétrica sob os pontos de vista materno e do radiologista, com enfoque do principialismo. Com abordagem qualitativa, exploratória e transversal foram entrevistadas 10 gestantes e 10 radiologistas, mediante entrevista semiestruturada, gravada e transcrita literalmente. As diretrizes metodológicas do Discurso do Sujeito Coletivo (DSC) foram utilizadas para a seleção das ideias centrais e das expressões-chave. Foram identificadas as seguintes representações sociais por parte das gestantes: "informações sobre o feto", "dia do parto", "orientação sobre o exame", "expectativa negativa superada", "bondade", "tratar bem", "pouca expectativa" e "atenção". E por parte dos radiologistas: "tranquilizar a paciente", "administrar situações", "tratar bem" e "atenção, respeito, confiança e carinho" para com a paciente. Constatou-se que na relação radiologista-paciente os conhecimentos técnicos específicos, o relacionamento humano e os cuidados com a gestante são imprescindíveis para a valorização da vida humana e dos preceitos bioéticos.

Palavras-chave: Relação médico-paciente. Radiologia. Ultrassonografia. Obstetricia. Bioética.

Resumen

Relación radiólogo-paciente en el examen ecográfico obstétrico bajo el enfoque bioético

Este trabajo ha objetivado conocer la relación radiólogo-paciente durante los exámenes de ecografia obstétrica desde el punto de vista materno y del radiólogo, con enfoque del principialismo. Con abordaje cualitativo, exploratorio y transversal, fueron entrevistados 10 gestantes y 10 radiólogos, por medio de entrevista semi-estructurada, grabada y transcrita literalmente. Las directrices metodológicas del Discurso del Sujeto Colectivo (DSC) fueron utilizadas para la selección de las ideas centrales y de las expresiones clave. Se identificaron las siguientes representaciones sociales por parte de las gestantes: " informaciones acerca del feto", "dia del parto", "orientación sobre el examen", "expectativa negativa superada", "bondad", "ser amable", "poca expectativa" y "atención". V por parte de los radiólogos: "tranquilizar a la paciente", "administrar situaciones", "ser amable" y "atención, respeto, confianza y afecto" para la paciente. Se ha constatado que en la relación radiólogo-paciente los conocimientos técnicos específicos, las relaciones humanas y los cuidados con la gestante son imprescindibles para la valoración de la vida humana y de los principios bioéticos.

Palabras-clave: Relación médico-paciente. Radiologia. Ultrasonografía. Obstetrícia. Bioética.

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In relations among people during professional exercise, quality determines the success of the meeting. Therefore, in the formation of the good physician, the physician-patient relationship is essential[1]. The field of bioethics has been considered a significant supporter of improvement of professional ethics, stimulating and disseminating success stories of doctor-patient relationship.

Bioethics records phenomenal increase across the globe, with theories, accents and different cultural practices, through complex conceptual variations. This field of reflection emerged in the laboratories of experimentation, where scientists wondered about the viability of certain ethical technical-scientific procedures. It presents as remarkable multicultural, interreligious, interdisciplinary and dialogue aspects in a pluralistic context in which dialogue and tolerance are key ingredients in the construction of knowledge. A knowledge that goes forward, always with the necessary prudence and boldness on one side, and the guarantee of innovative creativity, on the other side, required for any scientific endeavor[2].

Bioethics is a field of understanding and acting that pervades ethical-theoretical questions concerning health practices and dilemmas related to life and death. It is present, with increasing frequency, in several situations of inter-human social reality. From this perspective, it has to be understood as a product of human culture that excelled in the twentieth century and it must face some challenges nowadays: the complexity of the phenomena has to be analyzed, in order to look for a way to overcome the fracture between scientific and humanistic cultures; and the concern about the applicability of knowledge without losing productivity theory[3].

With respect to its applicability in health practices, bioethics can be worked in order to assist and complement the practice of radiology in view of conflicting situations in the diagnosis and treatment of diseases. This application will be delivered by the radiologist to the patient, with the physician performing the principles of autonomy, beneficence, non-maleficence and justice in a comprehensive way, so that the patient feels willingness to expose one's true anxieties and expectations about the diagnosis of the disease.

Among the multiple specificities of radiology, this article focuses on understanding the relationship between radiologist and pregnant patients during obstetrical ultrasonography, from the perspective and both, woman and radiologist, have as a theoretical basis the principialist model of bioethics, in which autonomy, beneficence, non-maleficence, and justice are essential, contributing to improve physician-patient relationship.

Method

This qualitative, exploratory and transversal study was conducted at the Samuel Libânio University Hospital (HCSL) and at private clinics in Pouso Alegre-MG, from July to December 2007. Because this qualitative study is concerned with the expression of subjectivity in collective thought, and, given the shortage of professionals in this expertise in this particular town, the research plan defined the number of interviews with radiologists and patients, considering the need to capture the specificity of this relationship. Thus, the sample consisted of 10 pregnant women who underwent routine ultrasound examination and 10 radiologists who perform obstetric examination. The delimitation and implementation of the work carefully followed the precepts established by the National Health Council (CNS) in Resolution 196/96.

Data collection was performed through semi-structured interview by a research assistant, who is a previously trained medical student in the fourth year of study, recording the interviewer's responses. In an attempt to minimize possible bias in the measurement, considering that the use of the instrument for data collection depends on memory, constraining the interviewer and understanding the research instrument, we conducted a pretest that allowed changes in the script of the interview, the interviewer training and an enhancement approach for better understanding of the questions by the respondents.

For pregnant women, some criteria for inclusion in the sample were considered: being of legal age, at any time during pregnancy; having been medically consulted, at least once, by a responsible physician; having clinical conditions present for the exam; having signed the informed consent term (ICT) after researcher's explanation, regardless of test results. Pregnant women who are underage were excluded from the sample, as well as those that did not attend any prenatal care; those who had no contact with the attending physician and did not agreed to sign the informed consent term.

Concerning radiologists, the inclusion criteria were: doctors who perform routine obstetric ultrasound and have signed the ICT. Radiologists who do not perform the diagnostic method in question and/or did not sign the consent term were excluded.

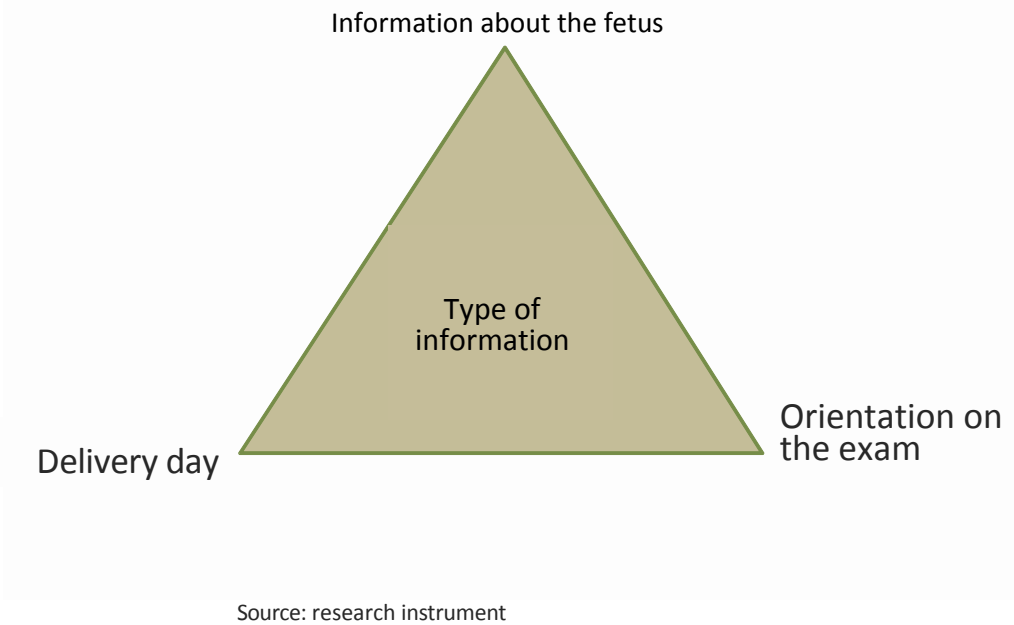
Data analysis in the study and methodological frameworks adopted the Social Representations Theory (SRT) and Collective Subject Discourse (DSC)[4] for the construction of meanings, allowing access to the observed phenomenon.

The method used for the evaluation of radiologist-patient relationship, the DSC 4, allowed collecting information through semi-structured questionnaires questioning both pregnant women and radiologists. For pregnant women, the questions were: 1) *What kind of information you did you receive during the exam?* 2) *What do you expect from the physician (radiologist)?* The radiologists were asked: 1) *to you, what is the significance of the physician-patient relationship during obstetric ultrasonography?*

Results

This part presents several *central ideas* (CI) apprehended from the questions and semi-structured research that culminated in the identification of key expressions (KE) in DSC of the ten women and ten radiologists.

Figure 1. CI on types of information received by pregnant women

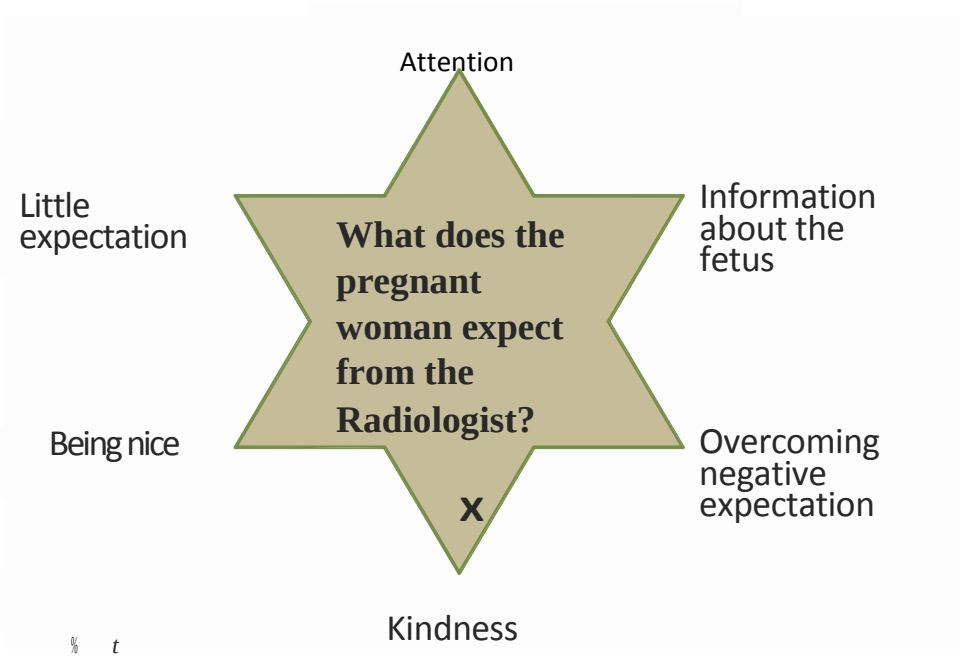


Source: research instrument

As expected, the CI underlying the theme "Type of information" focused the objective aspects in relation to the fetus pregnant women hope to get through the exam. The main answers were: "*information about the fetus*" "*guidance through the exam*" and "*delivery day*" .

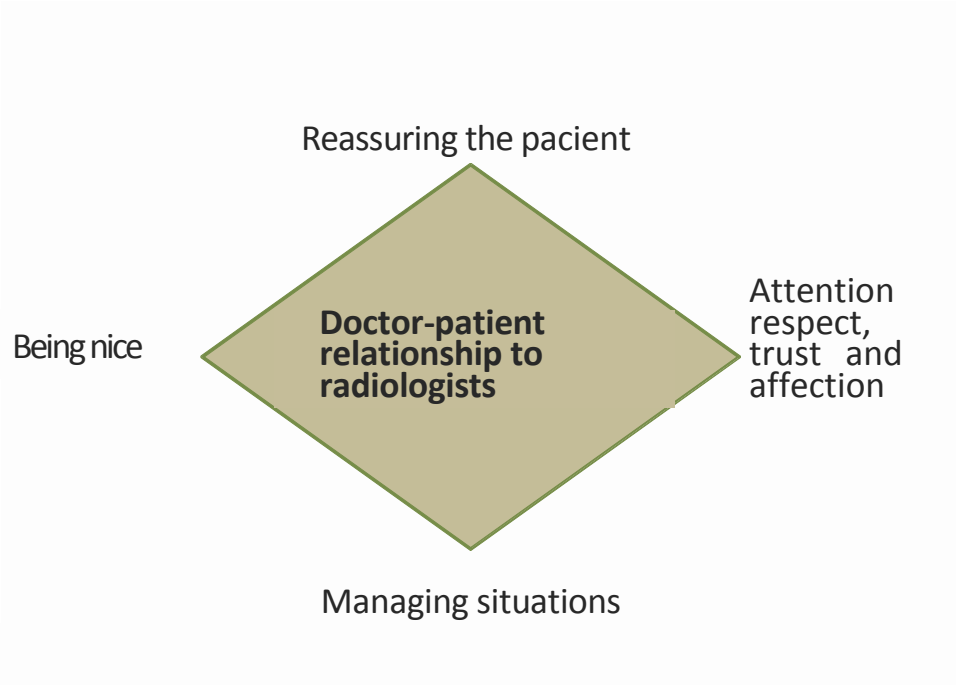
The CI related to the theme "*what does the mother expect from the radiologist*" were: "*attention*", "*information about the fetus*", "*overcoming negative expectation*", "*kindness*", "*being nice*" and "*little expectation*" .

Figure 2. IC on what pregnant women expect from the radiologist



Source: research instrument

Figure 3. IC on the meaning of patient-doctor relationship to radiologists



Source: research instrument

The IC related to the theme "*doctor-patient relationship to radiologists*" were "*reassuring the patient*", "*attention, respect, trust and affection" , "managing situations*" and " *being nice*".

Discussion

In assessing social representations of the subjects of this study about the relationship radiologist-patient to most patients, it was considered satisfactory, according to information received during the examination. The dominant central idea apprehended from the first question was information about the fetus, as provided most by radiologists, although the most common CI on the social representation about patients' expectation related to radiologists was *attention* offered to explain the procedure and evidencing the fetus wellbeing. The fetal images in obstetrical ultrasound became an object of consumption and leisure at the expense of medical imaging technology[5].

The popularity and importance of this diagnostic method result in greater demand of the exam by pregnant women, as a guarantee of fetus perfection. The mothers' ignorance on embryonic and fetal anatomy, charges the radiologist for the information given during the examination, not only on the description of the fetus, but also about pregnancy as a whole, authorizing the radiologist to provide information about the test and health status of woman, when asked. Additionally, the physician should provide beneficence, non-maleficence, autonomy and justice so pregnant women and their family find comfort and responsibility during the prenatal period.

In parallel, the importance given to fetal description by radiologists, as the main information provided, may represent a false proximity of radiologist-patient relationship by the easier acceptance of technology from pregnant women and physician. This can jeopardize the bioethical focus on radiologist-patient relationship, to the extent that it fragments the knowledge to facilitate understanding.

The delivery day is technical information given automatically set by the computer program of the ultrasound device, with a margin of error of 8% after obstetric ultrasound examination, to the measuring some fetal structures [6]. It is a situation that makes pregnant women very anxious, who are late in the third quarter, due to uncertainty of the date of the last period, leading to discussions on the best date of delivery without complications and with appropriate gestational age.

The guidelines on how to perform the exam – if it causes pain, when the result will be available, the length of the procedure, what can be individualized in each stage of pregnancy – are important questions to keep patient focused on the procedure. Therefore, she will be able to participate independently and more fully in the procedure, strengthening the relationship with physician. In this sense, the use of ICF procedures in the area of health is encouraged.

When asked in question two about the expectations on the physician, the prevalent central idea was attention to pregnant women. In certain situations, physicians are the only people trusted for honest dialogue, due to his professional stand and ensured confidentiality[7]. Physician, based on the principle of justice as defined in bioethics, has an obligation to make him understood, so dialogue cannot be reduced by the imposition of tests as more intelligent instruments than patients[8].

Some patients expressed surpassed negative expectation concerning the quality of radiologist--patient encounter and the ultrasound procedure. This is the third most central idea, which reveals their surprise and satisfaction with the service provided by doctors in the Single Health System] (SUS) during the performance of obstetric ultrasound system, often criticized by the dehumanization and devaluation of autonomy, beneficence and justice in relations. The yearning for appropriate, ethical and kind humane treatment on the part of doctors was also expressed by the interviewees.

The indifferent or little expectation concerning the patient-radiologist encounter during the obstetric ultrasound examination reveals the ignorance of bioethical principles and unpreparedness on the part of the women, compared to technological developments in imaging in the field of obstetrics. The meaning of the patient-doctor relation during the obstetric ultrasound examination interviewed radiologists,

contained in the three central ideas of the question 3 to them directed, presented four types of CI. The most frequent was reassuring the patient, followed by attention, respect, trust and affection, then managing situations, and, finally, being nice to them

In diagnostic imaging in obstetric ultrasound, the doctor-patient relationship involves three important moments: the contact between radiologist and pregnant, the contact between the radiologist and the doctor who requested the exam, and the contact between the doctor who requested the examination and the patient. It is a test in which the doctor has more contact with the pregnant woman and should fit in level 1 of radiologist-patient relationship, according to Armstrong[9] – that is a relationship in which the radiologist psychosocially engages with the patient and her family, explaining the best image study, trying to lessen the anxiety during the exam, becoming thus an integral part of the monitoring of the patient and fetus.

With respect to managing situations, the greater difficulty face by the radiologist at the time of obstetric ultrasound is meeting the patient for the first, and sometimes only, time. The disclosure of the diagnosis of fetal illness at the time of examination may displease the doctor requesting the ultrasound, since the patient has greater proximity with the medical prenatal care, and this can be taken by surprise at the return of the query. This circumstance tends to cause distrust and confusion in the patient, incurring therefore in malfeasance, considering that, in view of this diagnosis, she feels insecure and questions the outcome and conduct of the found problem. In parallel, according to the principialist principle of justice, the doctor has the duty to disclose the results to patient, if questioned, taking due care to avoid harming her with this information. The ideal procedure would be to inform the patient and the obstetrician at the same time, a situation that for many radiologists can disrupt the imaging service routine, phone calls and pre-booked schedules.

The radiologist should be a source of integration, guidance and discussion of clinical cases among doctors of all expertise not settling down in rooms report, without having contact with the doctors who requested the exams. It must be noted that the interdisciplinary and the relationship between radiologists and the requesting doctors, as well as between patient and radiologist, must be constant.

Throughout our study, the CI "attention, respect, trust and affection" demonstrate the concern of radiologists with patient satisfaction, preservation of the quality of radiologist-patient relationship and involvement in a bioethical relationship with the patient. The doctor-patient relationship is fundamental to the quality of the care service offered, to mutual understanding of the concept of health in daily practice (socializing health) and to succeed in the diagnosis and treatment of a disease in a specific patient. The access and patient's understanding of her problems and diagnostic imaging findings emphasize autonomy, reassuring and guiding her expectations.

If we consider ethical responsibilities, according to Armstrong[9], all radiologists in this study were concerned about protecting the patient. However, regarding information on the exam, most of them did not bother to clarify indications, results and destination. It was mentioned the ICF, as well as continuous learning and improvement of the technical examination – important aspects of medical and patient autonomy nowadays.

Conclusions

Concerning radiologist -patient relationship during obstetric ultrasound examination focusing bioethics, by the expectations of pregnant women and medical radiologists, we can conclude that:

a) receiving attention from the radiologist who performs the exam was a great expectation from pregnant women. This demand includes both technical aspects, in the explanation of all examination findings, and subjective aspects – receiving complex and humane treatment to maintain justice and autonomy of the physician-patient relationship;

b) for doctors, tranquility, beneficence, non-malfeasance and justice of the patient were important and crucial to radiologist-patient relationship, reducing anxiety and clarifying possible doubts about the test;

c) there was no significant concern on the part of the doctors in clarifying indications, results and the destination of the obstetric ultrasound exam;

d) managing difficult situations during the examination, such as the diagnosis of malformed fetuses and reveling that to the mother, was identified as a constant concern among physicians in order not to cause non-maleficence and preserve justice;

e) the relationship between the radiologist and the doctor who requested the examination, focusing attention to the pregnant woman, was also perceived as a concern of interviewed doctors;

f) it was not mentioned the use of ICF, continuous learning and improvement of technical examination by respondents.

In the era of rapid and self-sufficient consumption of health care services and of the increase of self-managed services of Radiology and Diagnostic Imaging, radiologists have to perceive their services through the patients' eyes and to placing humans in the first place, thus valuing the physician-patient relationship.

Differentiating current radiological practice should strengthen the relationship with the patient, including the ethics of justice, autonomy, beneficence and non-maleficence, valuing bioethics. There is new kind of relationship between patients, radiologists and the doctors who requested the exam, and those who do not adapt to this new condition will be left behind[10].

It is recommended that in radiologist -patient relationship the use of autonomy, justice, beneficence and non-maleficence should be guided and taught, because in the overvaluation of technology human relationship can suffer irreversible consequences over the generations.

Studies of this nature are encouraged, in order to widen the knowledge of bioethics in the various relationships between physicians, patients and populations with different characteristics and from different locations.

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Authors' participation

Augusto Castelli was the writer, carried out the bibliographic reviews, interviews with pregnant women, analysis of collective subjects speeches, he wrote the introduction, results, discussion, and final considerations. Kelly Cintra carried out the interviews with radiologists, helped writing topics, method, and discussion. Adriana Mendonça was the advisor and reviewer of the article for Master's degree, and helped writing the results, discussion, and the final considerations

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