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Ultrasonographic Diagnosis: The Issue from a Different Angle

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Abstract

The development of ultrasonography and its application as a noninvasive technique for medical surveillance of pregnancy involved the possibility of disturbing the tranquillity of intrauterine life, not only in order to measure and observe, but also on a more socially transcendent level. After a certain time, the developing baby can be assigned to the male or female sex. In this study we attempted to examine how mothers, fathers and persons in their social and family environment react when told of the baby's sex, and sought correlations between these reactions and previous expectations. Our results show that women during their first pregnancy do not desire to conceive females despite the fact that more females than males were identified in our study group. One of the main tasks of prenatal education may well be to provide support for those fathers and mothers who must accept that their child's sex is not the desired one.

Zusammenfassung

Die Entwicklung des Ultraschalls und seiner Anwendungen als einer nichtinvasiven Technik zur medizinischen Überwachung der Schwangerschaft bedeutete auch eine Störung der Ruhe des vorgeburtlichen Lebens, nicht nur wegen der Messungen und Beobachtungen, sondern auch im Hinblick auf eine mehr sozialpsychologische Ebene. Ab einem gewissen Zeitpunkt kann man das Geschlecht des Kindes

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erkennen. In dieser Untersuchung versuchten wir zu prüfen, wie Mütter, Väter und die Personen ihrer Umgebung auf die Mitteilung des Geschlechts des Kindes reagierten, und wir suchten nach Korrelationen zwischen diesen Reaktionen und früheren Erwartungen. Unsere Ergebnisse zeigen, daß Frauen während ihrer ersten Schwangerschaft kein Mädchen haben wollen. Real waren unter den werdenden Kindern mehr Mädchen als Jungen in der Untersuchungsgruppe. Eine wichtige Aufgabe der pränatalen Erziehung könnte darin bestehen, Väter und Mütter zu unterstützen, die das ungewollte Geschlecht ihres Kindes akzeptieren müssen.

Introduction

When new technologies appear for diagnosis and treatment, a number of years must pass before they can be evaluated from a social standpoint and in terms of health care. The introduction of ultrasonography in obstetrics represented a great step forward in the observation of the baby in the womb; in our current setting, most pregnant women have at least two ultrasonographic exams, one of which is done to determine the baby's biological sex. This apparently routine exam should make us think about some unknown factors: What future social repercussions does this determination have?

Before the introduction of ultrasonography, biological sex was normally determined in the home or the delivery room, where the fathers, mothers and relatives could hold the baby in their arms. Now, however, a black-and-white image of something of quite undecipherable appearance to the lay person determines, from as early as the first trimester of pregnancy, whether the developing child is a boy or a girl. From that moment on acceptance or rejection of the child is influenced by the desires and expectations of the group of people with whom the child will be raised. We could thus wonder whether this knowledge affects the baby's intrauterine psychoactive and physical development. How will the child's subsequent socialization proceed? What will the first months of life be like for baby boys or girls who do not satisfy the conscious and unconscious desires of the persons in their milieu? Until now, these questions have not received a suitable answer. We know of clinicians who never tell the mother her baby's sex during the ultrasonographic exams, because mothers interrupted their pregnancy if the child was not of the desired sex – hardly an insignificant matter in our view.

The objective of this study was to investigate how mothers, fathers, and members of the social and family milieu experience the moment during ultrasonographic examination when they are told the baby's biological sex. We attempted to relate their reactions to other variables thought to influence acceptance or rejection of this information.

Methods

We studied a group of 23 women in whom pregnancy had progressed to more than 20 weeks. Before the ultrasonographic exam, each woman completed a brief

questionnaire designed to collect information about the conscious and unconscious desires of the mother, father and other members of the family before the child's sex was known.

Mean age of the group was 27 years. Of the 23 women, 60% were housewives, 47% had attended only primary school, 11 were expecting their first child, and 12 had already started their family. (In the entire sample there were 12 sons and 8 daughters.) Mean gestational age at the time of the study was around 30 weeks.

Results

We divided the women into two groups: those (n = 11) who were expecting their first child, and those (n = 12) who had children from previous pregnancies.

Before the ultrasonographic exam, each woman was asked which sex she hoped for. The answers are summarized in Table 1: women expecting their first child rarely desired to have a girl; in contrast, women who had children more frequently hoped for a girl, as they had already fulfilled their desire to have sons (12 sons vs 8 daughters in the entire sample).

Table 1. Desired sex according to parity.

	First pregnancy (N = 11)	Multigravid (N = 12)
Boy	4	2
Girl	1	6
Either	6	4

We thought that asking about the women's dreams would provide information on their unconscious desires. However, these descriptions were uninformative, as shown in Table 2. Nonetheless, the women dreamed of daughters more frequently than they said they consciously desired a girl. Interestingly, women who had other children reported that they rarely dreamed of their new baby.

Table 2. Dreamed sex according to parity.

	First pregnancy (N = 11)	Multigravid (N = 12)
Boy	4	0
Girl	4	1
Didn't dream about baby's sex	3	11

We also asked the women about their partner's desires as in our setting they rarely attend the medical examinations with their partner. Table 3 shows that

the partner's desires often matched the woman's. However, only two couples reported dreaming, which may indicate that both dreamed infrequently, or that neither communicated his or her dreams to the other.

Table 3. Desired sex by the couple.

	First pregnancy (N = 11)	Multigravid (N = 12)
Boy	4	5
Girl	2	6
Either	5	1

During the ultrasonographic exam we identified the same number of boys as there were women who hoped for a son. However, the number of girls identified was greater than the number of future mothers who hoped for a daughter, the difference being greater among women expecting their first child (Table 4).

Table 4. Sex identified by echography.

	First pregnancy (N = 11)	Multigravid (N = 12)
Boy	4	4
Girl	6	7
Unclear	1	1

In our service, other members of the family usually accompany the women to her ultrasonographic exam to "see the ultrasonograph" and share the excitement of the moment. Table 5 shows the most frequent escorts: in women with other children, an older child was the family member who most frequently accompanied the subject.

Table 5. Family setting / echography.

	First pregnancy (N = 11)	Multigravid (N = 12)
Single parent	4	4
Couple	2	2
Mother	4	3
Mother-in-law	1	1
Children	0	5
Female friend	0	2

When the baby's sex was communicated, the reactions – whether positive or negative – ensued immediately. Below are some of the emotions expressed, which reflect the importance given to the baby's sex by other members of the family and imply ways in which these feelings may influence the baby within his or her social and family milieu.

In women expecting their first child, the information was received in one of the following ways:

- Spouse pleased because the diagnosis fulfilled his wish.
- Parents pleased because their dreams and wishes were fulfilled.
- Woman, accompanied by her mother, laughed with pleasure on learning that she carried a boy although she had dreamed of a girl. She had expressed no conscious preference.
- Dream of a daughter not fulfilled, but desire for a son satisfied.
- Grandmother's wish fulfilled, but not the parents' wish.
- Surprise that the baby's sex was the same as in the mother's dream.
- Mother disappointed at carrying a girl because she hoped for a boy.
- Mother-in-law pleased that the baby is a girl, although the couple desired a boy.
- Mother pleased at carrying a girl; she wanted a son and dreamed of having a girl.
- Parents pleased at carrying a boy because she desired a son.

The emotions expressed by women who had one or more children were also of interest:

- All the family excited and pleased because they wanted a girl and their desire was fulfilled.
- Pleasure because the baby was of the desired sex.
- Pleasure because the baby was a girl.
- Pleasure because the other child wanted a baby of the sex identified.
- Pleasure because the baby was a boy as desired.
- Disappointment at the diagnosis of a girl because all the family hoped for a boy.
- Both spouses pleased.
- Mother disappointed at the diagnosis of a boy.
- Grandparents, but not parents, pleased at the diagnosis of a girl.
- Resigned acceptance.
- Extremely pleased that the third baby is a girl as the first two children were boys.

Discussion

Our findings indicate that in a group of women expecting their first child, the conscious desire to have a daughter was infrequent. Nonetheless, ultrasonographic examination diagnosed females more frequently than males. The desire for a girl was more frequent among women who had other children, probably because these families had fewer daughters than sons. In these women the number

of female fetuses identified by ultrasonography was the same as the number of daughters desired.

The invasion of privacy as regards the baby's intrauterine development when the "secret" of the child's biological sex is "revealed" appears to be a decisive moment. The moment when the fetus is visualized and the child's sex is identified is filled with excitement and emotion for both the mother and other persons. It would thus seem reasonable to further investigate the repercussions of this event. We believe that programs of prenatal education should provide support to parents who must "accept" that their baby is not of the desired sex. This would help avoid problematic situations that might arise during adult life as a result of a technical procedure during prenatal life because of inadequate consideration for the sociological and affective repercussions of the use of this technology.

As this research was drawing to a close, we examined a woman who was carrying her second child. At her ultrasonographic exam during her first pregnancy we had told her she was going to have a girl. This beautiful child now accompanied her mother to the first ultrasonographic exam. During the exam, the woman made the following confession:

"Doctor, I hope you'll tell me it'll be a boy this time. Last year I was so disappointed even though you never said I was going to have a boy. I had everything prepared in blue and when they gave me the girl in ward, I wondered 'Where is my son?' I felt as if I had lost him."

Situations like the one described above emphasize how far away we are from understanding why most women hope that their first child will be a son rather than a daughter.

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