Sex and gender in reproductive medicine

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Abstract

Introduction
This paper focuses on sex and gender in reproductive medicine.

Short communication
The use of the sex-gender discourse in reproductive medicine has brought about awareness of the distinctive cultural and social attributes. Patients’ experiences also play a significant role in the discussion about the use and development of reproductive techniques. The term ‘in vitro’ fertilization focuses mainly on the somatic course of events. The wish to remain childless is usually determined by a change of values, individualization, the incompatibility of unifying child and job, single status as mother, the relegation of having a child to a later time in the future and then, finally, total renouncement. Medical prerequisites are laid down and social constructions coordinated in respect of the reproductive potential of the woman and her age. Differentiated models should become a topic of discussion concerning gender-specific aspects of reproductive medical concepts, both in thought and in deed and should be introduced to the empirical form of research in future studies.

Discussion
There should be an introduction of differentiated models into discussions about gender-specific aspects of reproductive medical concepts. Further studies are required to increase our knowledge and improve on the current methods we have.

Introduction
Gender research resulting from previous international research on women has revealed important views concerning the multitude of attributes pertaining to both women and men. The view that womanliness and manliness cannot be deduced from biological constants is defined by the historical, sociocultural construction of gender identity. The use of the sex-gender discourse has brought about an awareness of the distinctive cultural and social attributes of reproductive medicine.

The following article focuses on four aspects:
• Focus of reproductive medicine on the somatic course of events
• Psychological well-being ‘Revitalization of Subjectivity’
• Incidence of childlessness
• Constructions ‘Age of Woman’ in reproductive medicine

Short Communication
The author has referenced some of its own studies in this review. These referenced studies have been conducted in accordance with the Declaration of Helsinki (1964) and the protocols of these studies have been approved by the relevant ethics committees related to the institution in which they were performed. All human subjects, in these referenced studies, gave informed consent to participate in these studies.

Focus of reproductive medicine on the somatic course of events
The time from in vitro fertilization (IVF) with assisted reproduction up to the actual birth of the child entails several years of frustration as regards to treatment. The first IVF pregnancy was announced in 1973, but this ended in a miscarriage. In a subsequent pregnancy, however, the embryo was embedded in the fallopian tubes and had to be surgically removed. In 1977, a new study was commenced on 68 women. One case ended in a deformed, stillborn child and another case experienced an abortion. Altogether, up to the birth of the first IVF child, 200 embryos were transferred. In 1978, the first child was born following assisted reproduction. The general consensus was positive and regarded the assisted reproduction as helpful and humane. Reproductive medicine was proved successful. In addition to the IVF with tubal factor, the intracytoplasmatic sperm injection (ICSI) has also been introduced in cases of male subfertility. Treatment of infertility has become increasingly popular during the past 30 years in Germany. The German IVF report demonstrates an increase since 1982 of 742 assisted reproductive technique (ART) treatments each year with an increase until 1992 of 12,867 ART treatment and a further sharp increase in the last 8 years up until 2003 of 80,434 ART treatment. The regression in 2004 to 37,633 ART treatment is following the new German Healthcare Law in 2004. As part of the German Healthcare Law implemented in 2004, infertile couples face a 50% co-payment of the total ART treatment costs (circa. 2,000–2,500 Euro pro ART cycle). In 2010, German IVF report presents 50,583 ART treatment.

Psychological well-being ‘Revitalization of Subjectivity’
Medical help and techniques have granted the possibility for a desired child. The terms IVF and ICSI focus solely on what is happening in the
reproductive labour and represent therefore the only events and places where the woman is actually physically absent after a series of complex individual procedures performed in and with the body of the patient.

In the discourse concerning the application and developments of reproductive techniques, the experiences of the patient become of minor significance. The physicians responsible for reproductive medicine are able to distance themselves from the patient and their suffering. The woman is initially detached from her suffering. The alliance between the affected person and the reproductive medicine is concerned only with the goal to create a child by means of somatic intervention. To act professionally, rational way of thinking and demonstrated plan of action raises the hope in realization of a desired child. High level of expectation from men, childless women and men producing a child with the help of reproductive medicine are reported. Childless women and men were asked to state their expectation for success during the course of treatment using the scale of 0 to 100%. The median rated an average of 60% to get pregnant. In comparison, the average rate of pregnancy according to the German IVF register is 28% pro transfers. The rate of babies going home lies at 17%. There is definitely a discrepancy between the subjectively perceived chances of success and the objective medical pregnancy rates. At the time of the first discussion at the sterility consultation hours, the couples had high expectations that their wish for a child would be fulfilled. The chances of success for the fulfillment of the wish for a child exceeded the 'mathematical probability' by more than 50%.

An IVF diary was used for the purpose of a research project ‘Revitalization of Subjectivity’. The female patients and their partners were requested individually to report on their experiences during the course of the reproductive medicine cycle. The purpose of this action during reproductive medical treatment gave the couples a chance to perceive their individual experiences under somatic therapy. The qualitative evaluation of the emotional experiences during the waiting period included mainly negative emotions such as fear, tension, stress, uncertainty and doubt, also physical complaints.

Mrs C: ‘During stimulation I felt marvellous. Since follicle biopsy and embryo transfer I feel weak and without energy, suffer pain in the abdominal region and a tugging feeling in the uterus! I find this most disconcerting! It could become entertaining if this carries on for weeks!’

‘I feel very ambivalent at the moment. I keep on thinking about Thursday morning when I go to present my morning urine for the pregnancy test. On the one hand, I am looking forward to this, feel happy and enjoy the diversions around me in connection with “our baby.” On the other hand, I do not wish to raise my hopes too high for the fear of the overwhelming disappointment should I not be pregnant! Euphoria versus pessimism? Today for the first time, I felt negative and depressed. I cannot imagine that the fertilization will have taken place and feel powerless, helpless and also worthless.’

Compared with the waiting period, the time of embryo transfer in our study appeared to be much more positive. Hope and joy were most often expressed at this time in comparison with the rest of the course of therapy. Negative aspects at this stage were hardly mentioned. This has been described too by one of our other patients.

Mrs W: ‘Today was the transfer. I was told that the embryos were looking good. Despite the extreme pain, it is a wonderful feeling to know that there is “life” buzzing about inside me.’

Mrs G (embryo transfer): ‘I am experiencing feelings of hope, joy (as something is being done about our desire for a child) and fear of disappointment.’

The absence of pregnancy brings about psychic stress. The women complained of exhaustion, disappointment, helplessness, hopelessness and depressive symptoms.

The reproductive medical treatment cycle reduces the ‘intense living and experiencing the unfulfilled desire for a child’ first of all to a distant and vague form of living and suffering the objective somatic course of events. During the course of treatment, the process of accepting the experience of loss is often avoided and ill-health and helplessness are ignored. The admission of grief and ambivalence, also the never-ending discussions, are necessary to overcome the sorrow incurred by infertility. The idea to write a diary during a reproductive medical treatment gives the patients the possibility to perceive their individual experiences and to reveal their subjective experiences. Following completion of the somatic therapy, the patients are encouraged to talk about their emotional feelings, such as a decrease in their self-esteem, sorrow and depression, also aggression and the process of trying to accept the diagnosis of infertility.

Case: Unsuccessful therapy
A twenty-four-year-old patient, primary idiopathic sterility, five years under treatment (four intrauterine insemination, two IVF, three ICSI, three frozen pronuclei).

Doctor: ‘HCG today < 6 IU/ml. Extensive discussion. The couple is desperate in view of the numerous attempts. Now renewed stimulation in long protocol. Additional leucoskure. Additional polar body diagnostics. The couple has been informed that both...’

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measures should be considered as an experiment only. Nevertheless, they are willing to try out both methods'.

The emotions experienced by the couple are perceived, but not considered during the reproductive medical discourse. The idealization of the reproductive medical techniques is continually using the most up-to-date therapy options.

Many couples go through the grieving process because of impaired fertility and the impossibility to have a child. Even if the couples have resigned to the fact that the ‘impossible’ will not happen, the chance to try again with in vitro treatment gives them a new hope and pushes aside the feelings of despair. However, the question remains—do these feelings of despair completely disappear with the prospect of IVF? The treatment gives way to further reasons for sadness: the treatment is connected with a loss of power over one’s own body, namely, the integrity and the total sensations of body and mind are abandoned. Also oocytes that do not fertilize or embryos that do not develop and do not implant in the uterus represent for many women the inspiration of fantasy and hope. The reasons for grief in view of a pregnancy are, in fact, more obvious and more tangible than before. Unresolved denial tendencies and feelings of guilt, an independent investment mentality—I have already been through so much that I can cope with whatever lies before me—as long as a new feeling of hope is present, the feelings of sorrow are relegated to the back of the mind.

Discussion

Incidence of childlessness

The number of childless couples has been reported as more than 1.5 million couples in Germany. The difficulty lies in the differentiation between desired and undesired childlessness. Only 3% remain conclusively childless. Why is this? Hardly any other figure has raised so much national indignation as the birth rate over the past few years. The true number of children born to a mother is realized only once the birth phase has ended. Statistics state this as 45 years. This conclusive birth rate, which can be evaluated for each age group for women, is a much more reliable source of information. The most up-to-date values of the conclusive rates originate from the age group of mothers born in 1960. Over the past 30 years, the age of bearing the first child in Germany has risen from just over 24 years then to 29 years today. The German microcensus is applied to evaluate the rate of childlessness around 1% of all German households (microcensus regulation)\(^7\). A woman is considered childless when no children of her own are living in the household. Women in general are considered childless if they have no children at a certain point in time; however, at a later age, they may well have children, women whose children are over the age of 18 years, women whose children have moved out of the family home, women whose children are living with someone else. Several young female academics when questioned stated that they were childless; 30% were 39 years of age. A thesis claims that women do not have many children because they are more inclined to pursue their career.

Childlessness in Germany is generally considered a women’s problem. A study was conducted concerning the topic based on the desire for a child and starting a family. A representative cross-section of middle-aged women and men with a university degree participated in this study\(^8\). This specific age group was most appropriate for this study as they were already in the end phase of family planning. A differing set of age groups for women and men was chosen in the random test in order to select members of both sexes in the end phase. This entailed questioning women between 35 and 44 years and men between 40 and 45 years. About 79% of the women and 20% of the men questioned were reported to have children of their own. Age played a minor part regarding information given by women (35–39 years: 20%, 40–44 years: 22%); however, this varied greatly with the men. The percentage of childless men and women aged 40–44 years (34%) was found to be much higher than with those aged 45–49 years (25%). Men with a university degree were in favour of having children at a later age. In all age groups, a greater number of men were found to be childless when compared with women. Childless men aged 40–45 years were at 24%, which is double the percentage of similar aged women (12%)\(^9\).

Constructions ‘Age of Woman’ in reproductive medicine

The spectacular case hits the headlines and is reported on extensively by the media. The image of a typical sterility patient is that of an older woman who has reached her professional goals before starting a family and now has overstepped her most fertile years. This image is featured in the public news, also as contributions to specialist literature, underlining the fact that the age of the woman is the limiting factor for the success of sterility therapy. In the case with couples where the man suffers from subfertility, it has been proved too that the problem also lies with the partner with poor oocyte quality due to her mature age. The increase in age when starting for the first time to try and conceive a child also plays a large role in the increasing rate of childlessness. Several articles state that the age of the woman influences greatly the success of reproductive medical therapy. The age of the woman is considered generally as the main factor concerning

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prediction of the success rate for IVF: medical standards are set and social constructions formed regarding the reproductive potential of the woman. Reproductive medical reports and articles focus on the problem of the female patient.

The patient who is desperate to have a child at this later stage is usually an exception to the rule. Professional reasons are not the main reason here, but the wish to have a child with a new partner. In the case that one takes on a younger partner it may happen that the wish for a child later on in life takes place even after family planning has been finalized already in the past relationship. Grandmothers also present for consultation with the desire for a child at the age of 40–45 years. The notion that reproductive medicine represents the solution for fulfilment for the older career woman who has already achieved her goals professionally and privately and now wishes for a child to complete the purpose of her life is not altogether well received. They wish for help only in planning a family as and when desired. The postponed wish for a child later on in life appears overestimated with the childless ‘older woman’. The main reasons for infertility cannot be investigated here and thus made responsible for the unsuccessful course of reproductive medical treatment.

Incorporated into the psychosocial discourse is a differentiated view of the construct ‘Age of Woman’ and the associated connections: the higher age group presents, in view of the reproductive abilities, a risk factor, since it can bring about fear of failure, guilt feelings and depression in those women who wish for a child but are unsuccessful. Most probably, this overestimation of age is only a rudiment stemming from the time of commencement of reproductive medicine when women who had exceeded the median of the reproductive phase (keyword: ‘biological clock’) turned to the doctor for help following long-term childlessness.

With these facts in the background, the wish for a child late in life appears a myth. There is no question of doubt as to the connection between the age of the woman and the success rate of reproductive medical measures. However, the higher age woman with the wish for a child is not the classical example. This construct corresponds rather to the expectations that are sociopsychologically derived from a theory of daily attributions: A basic principle quotes that ‘simple versus complex causative attributes are favoured and that the confirmation of a hypothesis is easier to interpret than its refutation’.

Conclusion
The question still lies open as to whether the growing perceptions regarding aspects of illnesses and treatments should be included in the reproduction medical prophylactic practice.

Differentiated models should be introduced as a topic of discussion concerning the gender-specific aspects of reproductive medical concepts, both in thought and in deed and should be included in the empirical form of research in future studies.

Abbreviations list
ART, assisted reproductive technique; ICSI, intracytoplasmatic sperm injection; IVF, in vitro fertilization

References

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