

Moral implications of obstetric technologies for pregnancy and motherhood

Susanne Brauer¹

Published online: 3 April 2015
© Springer Science+Business Media Dordrecht 2015

Abstract Drawing on sociological and anthropological studies, the aim of this article is to reconstruct how obstetric technologies contribute to a moral conception of pregnancy and motherhood, and to evaluate that conception from a normative point of view. Obstetrics and midwifery, so the assumption, are value-laden, value-producing and value-reproducing practices, values that shape the social perception of what it means to be a “good” pregnant woman and to be a “good” (future) mother. Activities in the medical field of reproduction contribute to “kinning”, that is the making of particular social relationships marked by closeness and special moral obligations. Three technologies, which belong to standard procedures in prenatal care in postmodern societies, are presently investigated: (1) informed consent in prenatal care, (2) obstetric sonogram, and (3) birth plan. Their widespread application *is supposed* to serve the moral (and legal) goal of effecting patient autonomy (and patient right). A reconstruction of the *actual* moral implications of these technologies, however, reveals that this goal is missed in multiple ways. Informed consent situations are marked by involuntariness and blindness to social dimensions of decision-making; obstetric sonograms construct moral subjectivity and agency in a way that attribute inconsistent and unreasonable moral responsibilities to the pregnant woman; and birth plans obscure the need for a healthcare environment that reflects a shared-decision-making model, rather than a rational-choice-framework.

Keywords Prenatal care · Birth · Pregnancy · Motherhood · Sonogram · Autonomy

Introduction

In modern societies the beginning of the “biological life” (Waldby 2002: 313) of a child is placed in a medical context: Conceiving a child can be the result of various reproductive technologies, and experts see gestation and birth as at least demanding medical observation. While infertility may be considered a disease, pregnancy and birth are not diseases but physiological processes. In the latter case medical diagnosis and intervention are justified on the ground of prevention: regular check-ups are necessary in order to ensure a medically-defined “normal” course of gestation and delivery, and to recognize pathological deviations early on. Preventive and diagnostic medicine is concerned with the physical well being of the expectant mother and the biological development of the embryo, fetus and newborn.

What is at issue in the description just given is the target of medical intervention, namely the *biological* aspects of being a pregnant woman and of becoming a child to be born. The argument defended in this article is that medical practice in the context of pregnancy and childbirth also bears moral meaning. *How* conditions are medically prevented, diagnosed and treated have moral implications for the conception of pregnancy and motherhood. In other words, obstetrics and midwifery are value-laden, value-producing and value-reproducing practices, values that constitute the social perception of what it means to be a “good” pregnant woman and to be a “good” (future) mother. Activities in the medical field of reproduction contribute to “kinning”, that is the making of particular

✉ Susanne Brauer
brauer@brauerstrub.ch

¹ Institute for Biomedical Ethics and History of Medicine, University of Zurich, Zurich, Switzerland

social relationships which are marked by closeness and special moral obligations to one's kin (Schnegg et al. 2010; Hauser-Schäublin 2010; Stone 2003).

This moral dimension is well illustrated by certain legal restrictions on reproductive technologies. Who is entitled to an artificial insemination by donors, in vitro fertilization, or pre-implantation genetic diagnosis, for instance, depends, in some countries, on not just biological factors such as age, but also on history of diseases and genetic disorders that run in the family, on legal aspects such as marital status and even on the most intimate matters such as sexual orientation of the hopeful parents. In Switzerland, for instance, only heterosexual married couples are entitled to IVF or artificial insemination by donors. Civil partners and unmarried women are denied access to these reproductive technologies. The assumption is that heterosexual married couples still serve as the ideal of a family that includes children.

In the case of obstetric guidance through gestation and delivery, the moral component of intervention might be less obvious than in the case of artificial fertilization, but, it is argued here, does exist. Following a general approach of Science & Technology Studies, the considerations at hand begin with the assumption that technology is the application of scientific knowledge for practical use. Thereby technology is conceived as being a largely social activity (Sismondo 2004: 9), which plays a constitutive role in subjectivity, identity and relationships (Hogle 2007: 849f.) This approach will be applied to different forms of technologies in obstetrics. Since the body of knowledge that is used in obstetric practice is not only coming from medical science, but also deriving from bioethics and law, conventions in medicine are counted as technologies as well, although they are not material mechanisms. By this way, general mechanisms of how moral conception of agency, subjectivity, relationship and responsibility are formed and perpetuated in prenatal care and birth care are to be explored. In what follows, the moral implications of three technologies will be elaborated: (1) *informed consent* in obstetrics as the principal communicative technique to regulate medical interventions according to legal and bioethical standards; (2) the standard use of *sonogram* as an apparatus in prenatal screening; and (3) *birth plan* as a form of an advanced informed consent, that is a communicative technique to determine the mode and circumstances of delivery prior to birth.

The aim in investigating these three technologies is twofold. First, the moral implications of the three technologies will be unpacked by way of a critical reconstruction. Next, following an approach of bioethics as a normative enterprise, the reconstructed moral implications will be evaluated from an ethical point of view. This ethical evaluation is not to be accomplished by referring to some

universal principles that serve as grounds for criticism of moral failure. Instead, an evaluation is introduced by posing two questions. The first question is whether the reconstructed moral implications of obstetric technologies do actually fit the declared moral values and self-understanding of the agents who are involved in obstetric practice. That is, to ask whether the moral implications of technologies in practice coincide or contradict with the aspired moral values of obstetric care.

This comparison between actual and intended moral value is the first step in building up a normative critique because tensions here would provide a reasonable cause for change (though it remains open what kind of change would be required). Even if moral practice and moral intentions are contradictory, it could still be the case that the practice is morally more desirable than the moral effects initially intended. A second question to pose is then whether the persons involved in a practice want to be the kind of moral agents that they actually are. This question is the real test case for the moral worth of a practice—and of course it is a question, and one not up to a philosopher to answer, but rather a starting point for public deliberation.

Informed consent in obstetrics

Informed consent is *the* preeminent communicative technique in medical practice, which serves the goal of patient autonomy, and shapes the relationship between patient and healthcare provider profoundly. In this respect bioethical literature on patient autonomy and informed consent as the appropriate “translation” of this moral principle into practice, has deeply influenced medical care practices in contemporary Western societies (Faden et al. 1986).

The importance of patient autonomy is displayed in national legislations and international law such as the European Convention on Human Rights and Biomedicine. From a legal point of view every medical intervention, including therapeutic, palliative, diagnostic and preventive measures, is potentially an infringement on the bodily and psychological integrity of the patient—regardless of whether the intervention is medically necessary. Each intervention is therefore in need of consent from the (competent) patient in order to be legitimate (special cases are emergency cases and medical decisions concerning incompetent or unconscious patients). This is especially true for routine prenatal care where the purpose of medical intervention is diagnostic and preventive in nature, and not the treatment or eradication of disease.

In order to evaluate the technology of informed consent it is necessary to investigate whether the moral implications of this communicative technique live up to the legal and ethical standard of patient autonomy. There are three

structural factors essential to the usage of informed consent. First, a person can only consent or dissent to options offered to her by healthcare providers. She cannot *demand* treatment options that are—from a medically defined perspective—futile or inefficient, and that are not cost-effective. Second, a patient cannot control which options are offered to her. It is part of the medical authority to choose among the options presented to the patient. These options vary over time and from region to region according to what is currently considered best clinical practice. Third, a patient cannot refuse to enter the interaction of informed consent. That is, a competent patient cannot refuse to be informed and to make decisions on the ground of this information and against the backdrop of social and moral expectations accompanying the options at issue (van den Daele 1988: 207). The patient has the choice between consent and dissent, but she cannot prevent decision-making in general. Since it is in the power of the medical staff to decide whether or not to enter an informed-consent-interaction and when to do so, informed consent situations could well be assessed as a compulsory situation of decision-making instead of a prime example for practiced patient autonomy.

These general observations on informed consent may also be applied to obstetrics. In routine prenatal care the number of decisions a woman must make has increased with the availability of new technologies, such as sonogram, blood tests and amniocentesis. Recent studies show that the use of these technologies are increasingly offered as part of screening procedures including all pregnant women regardless of age or medical history (Seavilleklein 2008). Now it could be argued that increasing the number of decision-making scenarios amounts to promoting women's autonomy. The pregnant woman gets to choose methods for monitoring the well-being of her fetus, as she wishes. It is simply the task of healthcare practitioners to provide her with the information she needs to understand what is being offered and to privately decide what medical technologies she wants to make use of. Making decisions possible for a pregnant woman and respecting her choice could be welcomed as enlarging her influence over her own prenatal care. If patient autonomy is best expressed by informed consent, one could conclude that the more decisions there are the better.

However, this perspective is far from being accurate for various reasons. First, it is questionable whether informed-consent-interactions are valid decision-making-situations in which the woman is being presented with at least two *equal* options, or whether the interaction presents rather an "illusion of choice" (Sherwin after Spoel 2006: 203). A closer look at patient consent in certain settings might reveal implicit suggestion by experts that one option is the more reasonable and common one to follow (e.g. receiving

a sonogram). In this case, patients are inclined to make the choice that they perceive is the "desired" or "correct" one. This unintended bias, in which recommendations of the physician during a consultation are legally prohibited, has nevertheless been detected (Samerski 2002). Also, it is easily conceivable that some women consent to testing because they just want to bring the interaction with the physician to an end. Giving consent could be an effective coping strategy within informed-consent-interactions perceived to be stressful or "invasive", or to prove oneself to be a "reasonable and responsible future mother" (Bister 2010), namely to strive for fetal perfection (Kukla 2005: 126). In addition, various other dynamics of the relationship between pregnant woman and her obstetrician might make it difficult for the woman to reject her physician's recommendation (McLeod 2002: 136).

It is also the case that doubts can be cast on the quality of information provided (or the success of imparting it) to a pregnant woman by a healthcare provider. Some empirical studies show that women may misunderstand that prenatal diagnosis is not mandatory, and that the result of the intervention is of merely diagnostic use and not therapeutic (Seavilleklein 2008: 71). Though other studies confirm some women realize prenatal tests are not obligatory and that they do not contribute to fetus health (García et al. 2011: 463). In any case, without special counseling, it is difficult to assess, for instance, the usefulness of a screening test to one's personal situation (García et al. 2011). What is more, when being asked about testing preferences some women do not realize that it is not the test that is actually at issue, but the decision to abort a potentially abnormal fetus if the test reveals something problematic. This could lead to paradoxical preferences. A Dutch study on prenatal screening for Down syndrome revealed that those who accept testing have ambivalent feelings regarding the purpose of the test. While their decision was guided by a wish to know and confirm whether the baby is healthy, they reported reluctance to make further decisions on a termination of the pregnancy (García et al. 2011: 412).

The self-understanding of the medical practice (namely to promote and respect autonomy through informed consent) is thus apparently challenged by the actual circumstances of informed-consent-interaction: namely, involuntariness of entering the interaction; limited or misunderstood transfer of knowledge; bias in presentation of options; and a tendency to fulfill perceived social expectations. Since the practice of informed consent as a communicative technique to secure legally and ethically recognized standards of patient rights does not live up to the ideal of autonomous choice, informed consent practice should be reworked. In the following two sections this assertion will be further developed by investigating two examples where informed consent is required: sonogram screening and birth plan.

Sonogram screening

Sonogram is a classic example of a technology adapted to standard (prenatal) care where counseling prior to screening is no longer practiced (Seavilleklein 2008: 75f.). Obviously, the lack of counseling poses a problem with regard to the requirement of informed consent for diagnostic procedures. However, this line of criticism is not of interest. Instead this section will focus on the moral conception of motherhood, woman–fetus-relationship and pregnancy that is suggested by the offer and use of sonogram.

Peter-Paul Verbeek argues forcefully on how the technology of obstetric sonogram (as a visualization of the fetus) is not an innocuous one (Verbeek 2008). Reflected sonogram waves have to be translated into a picture on a screen on which the size of the fetus is much bigger than in reality. The fetus is constructed as an individual subject, who can be gendered and even named before birth. Since in the visualization the fetus is freely floating in the womb it seems unconnected to the pregnant women. It is well known that these visual effects have been used for political purposes in pro-life campaigns, and have been highly criticized by feminists (McLeod 2002: 156). Through the visual construction of the fetus with sonogram the woman loses the privilege of an (almost) solitary sensual access to the fetus (Little 1996). If the physician wants to gather information on the fetus she turns her attention to the computer screen, not to what the pregnant woman has to tell (Rapp 1997: 37, 39). The experience of pregnancy has been partly externalized and given over to technological observations, which makes it possible to omit the subjective experience of the woman from medical discourse, devaluing her specific experiences and relationship to her fetus and body (Young 1984).

As feminists have pointed out, one obvious moral effect of this representation through obstetric sonogram is the (potential) disempowerment of women through losing the primacy of their subjective experience. One could argue, however, that since sonogram has been part of standard prenatal care for almost 30 years, it is a culturally well-established mode of perception in pregnancy that has an immediate impact on how the subjective experience of pregnancy is shaped. Thus sonogram does not necessarily have an alienating effect on some “original” experience of pregnancy, but could rather be a constitutive part of a personal experience of pregnancy in cultures where sonograms are routine. Carolyn McLeod, for instance, recommends that obstetric medicine not make any presumptions about how pregnancy and the maternal-fetal relationship are experienced by a woman. McLeod suggests a model of pregnancy as a relationship that can “accommodate a varying degree to which women view their fetuses as parts of them” (McLeod 2002: 160).

Another issue to consider here is the morally significant effect of the maternal-fetal separation, such that the fetus can be thought of as an individual who has interests and rights of its own (Duden 2002; van den Daele 1988: 190f.). A potential conflict of interest is sharpened by the fact that the fetus is not only conceptualized as an individual but also as a patient. The purpose of sonogram is to detect abnormalities and it so thrusts the fetus into the role of patient (Finkler 2001: 238). This illustrates a “medicalization” of pregnancy, rife with multiple and also contradictory consequences for the moral conception of motherhood.¹

The pregnant woman as environment and moral agent

As a medicalized (albeit natural) process, pregnancy is thus seen to require continuous monitoring by experts. While the fetus is imagined as a vulnerable individual, possibly at risk, the pregnant woman is regarded as a potentially harmful environment. This “opens the way for using ultrasound screening as a form of surveillance, monitoring the lifestyle and habits of expecting women in order to enhance the safety of the unborn” (Verbeek 2008: 17). The first problem with regarding a pregnant woman as the “environment” of a fetus is that an environment is, by definition, marked by passivity, not by agency. It is thus counter-intuitive to attribute moral responsibility to a mere “environment.”

Second, the view of a pregnant woman as an environment does not align with her role as a decision-maker (or moral agent) in prenatal care. The presumption is that by giving or withholding consent to prenatal procedures, she takes responsibility for her fetus’ health. But this is also counter-intuitive as the pregnant woman is thus supposedly responsible for circumstances that, to a large extent, are not in her power. She can neither influence the genetic endowment of the fetus, nor control most of the physiological aspects of her pregnancy (e.g. conditions or diseases that might endanger the fetus, such as pre-eclampsia or infection). Combined with the fact that the aim of prenatal tests is merely diagnostic, not therapeutic, a pregnant woman has simply too little control over her fetus’ health to ascribe

¹ Sonogram enables also the future father to make visual contact with the fetus. Since the fetus is constituted as a subject separated from the woman and as a being in need of protection, the future father might feel more involved and responsible for the well-being of the fetus. This is a novel situation because it facilitates the possibility of a felt engagement of the future father with the fetus. However, there still exist double standards for “responsible parenting” and “duty to assist” for the man and the woman, especially in the USA where court-ordered caesarian deliveries are known, but no court-ordered duty exists for a father, e.g. to donate a rein to his child (Little 1996: 395).

moral agency to her. That is, having at least some options to facilitate the positive outcome of fetal development is a necessary condition to attribute moral responsibility in a reasonable manner.

This, importantly, also holds if her responsibility is only understood as a “role-responsibility” (Dworkin 1981: 29), that is the responsibility of the pregnant woman to take charge of certain areas such as her health through responsible (that is not health-threatening) behavior (e.g. healthy diet, avoiding smoking and alcohol). Enlarging the realm of responsibilities for the fetal development to influencing causes that are beyond the woman’s reach (e.g. genetics, environmental pollution, additional behavior etc.), is the third friction in the attribution of moral agency in pregnancy (cf. McCullough and Chervenak speak only of an “beneficence-based obligation to the viable fetus” only to take those risks “reliably thought to be reasonable” (McCullough and Chervenak 1994: 104).

Such enlargement of the woman’s responsibility might be a sign of blurring the fact that the relationship of the pregnant woman is still to a fetus and not to a born child. As Sarah-Vaughn Brakman et al. assert, the physical connection of pregnancy does not itself initiate the nurturing relationship considered to be the basis of motherhood (Brakman 2006). In other words, according to a conception of parents as nurturers, the genetic connection between the fetus and the woman is not sufficient in order to establish a mother–child-relationship complete with parental responsibilities (Callahan 1995: 19; 23; 144).

The moral conceptions of a mother–child-relationship and of a woman–fetus-relationship might, at first glance, overlap in the following respect: both relationships are structured by the goal to act in the best interest of the fetus/child by focusing on presumed risks to its well-being. But in the case of prenatal testing, the interests of the mother and her fetus may be at odds: diagnosis of certain conditions via prenatal testing (e.g. down syndrome or severe disabilities) is almost pointless unless termination of the fetus is an option. Termination (abortion), however, contradicts so-called motherly obligations to a (born) child and puts the pregnant woman in an ambivalent situation; namely on one side the obligation to detect risks for the fetus and thus to undergo prenatal tests, and on the other side not to terminate an (advanced) pregnancy, which could be taken as signaling a lack of motherly feelings or “parental virtue” (McDougall 2007) in that she does not “accept” the unborn child.

Apparently, such contradictions are not an issue in the medical profession which often considers the rejection of prenatal tests to be “irresponsible” (Kneuper 2005: 61–68). But it is confusing what “responsibility” implies: For whom is disability actually a “harm” or a “wronging”? For the future child because it might suffer, for the parents

and the family who will be burdened by the care of a child with disability, for the health insurance and other social institutions because they have to contribute to the cost of care? The only way to avoid “harm” in these senses is by terminating the pregnancy. So the primary moral duty of the pregnant woman might not lie with the fetus, but rather with the persons and institutions that could be negatively affected by a future child’s disability. A woman thus has to *decide whether to stay pregnant*. In this view, responsibility is regarded as gaining knowledge about the fetal health in order to determine whether the outcome of the pregnancy is “undesirable” and thus should be “prevented” by abortion. Barbara Katz Rothman coined the term “tentative pregnancy” (Katz Rothman 1986) to capture this predicament, and with the spread of routine prenatal screening procedures, it aptly describes a growing number of pregnancies. A woman now has the responsibility to “correct” the course of natural events if nature itself fails to eliminate a disabled fetus (García et al. 2011: 464; Samerski 2002: 221). This perception of moral responsibility in pregnancy coincides with the view of pro-enhancement ethicists like John Harries who asserts that “unconditional parental love” implies selecting the child with the best genetic endowment (Chan and Harris 2008; cf. also Davis 2008).

Flaws in the account of assigned moral responsibility in pregnancy

There are a number of flaws in this kind of assigned moral responsibility in pregnancy. One could generally object to the idea that it is a moral obligation of the pregnant woman to *select* her fetus on the ground of its health status (Katz Rothman 1986). Others could argue in the name of the woman’s autonomy, that she should have the choice to decide whether to abort her pregnancy, though she is *not* morally obliged to do so.

One could also question if prenatal testing itself provides a solid basis for such important decisions. Empirical studies demonstrate a number of problems evolving from risk perception, communication and management. An in-depth study on genetic counseling in Germany revealed a large discrepancy between an expert understanding of the terms “risk” and “probability” and the common understanding of these terms (Samerski 2002; cf. also Kneuper 2005: 195–208). Moreover, what is “normal” or “abnormal”, and what is a “risk” varies from country to country, from profession to profession, and from person to person thanks to a number of factors (Downe 2004). In addition, prenatal testing at best offers only probabilities; it is not a window into the future (Samerski 2002: 53). What is more, prenatal testing does not determine the degree of a disability in life outside the womb. The range of disability for children with Down Syndrome, for instance, is extremely

large. It is a considerably opaque and complex task to make decisions on the basis of future outcomes that are largely hypothetical, that is to assign personal meaning to the statistics provided by prenatal testing (Samerski 2002: 218; 232).

The logic of risk and of informed consent: problematic implications of sonogram

The moral duty of the pregnant woman communicated through prenatal testing is to avoid risk to the life and well-being of the unborn child. Talking about the woman–fetus-relationship primarily in terms of risk unavoidably shapes their relationship. The pregnant woman is expected to decide rationally, that is by means of a cost-benefit-calculation (Samerski 2002: 61), although the decision is tremendously complex (see above). Plus the view of the woman as a rational calculator contradicts the sociological assumption that the decision to become a parent cannot be placed in a rational-choice-framework (Burkart 2002). To put a woman in a position in which she is expected to act in accordance with a cost-benefit-calculation might undermine her feelings towards her fetus as well as her self-perception as a future mother whose love for her child is unconditional. As a result of trying to unite these conflicting social expectations and to cope with the challenges of a complex setting for decision-making, prenatal tests can cause iatrogenetic distress to the woman (Downe 2004: 99). By offering prenatal tests, obstetricians may engender fear and uncertainty in the pregnant woman, which can then only be overcome by further application of technology to reassure her that “everything is o.k.” However, the need for reassurance can never be fulfilled, since the results produced by sonogram, for instance, are probabilistic and prone to error (McLeod 2002: 138). The constantly nurtured anxiety surrounding pregnancy is not only a psychological handicap but it also sets the moral tone for motherhood: a responsible mother is in rational fear, focusing on the health risks to her child, and taking as her primary duty avoiding them—regardless of her actual ability to thwart such risks.²

Sonogram screening is a particular example of an informed-consent interaction whose upshot is a decision that cannot be avoided by the pregnant woman once she has submitted herself to a healthcare provider for prenatal care. The requirement to decide about prenatal screening (Samerski 2002: 244) is now more ubiquitous than ever because all women (e.g. of a certain age) are offered

sonograms regardless of their personal values or medical record, or a determination of its psychological impact. She may refuse to have an obstetric sonogram, but she cannot escape *deciding* about it if it is routinely offered to her as part of standard prenatal care. The ubiquity of sonogram has deeply shaped the relationship between a woman and her fetus in the sense that the woman cannot break away from being socially perceived as separate from her fetus (van den Daele 1988). She also cannot avert the assignment of responsibilities that comes along with this separation (i.e. testing for and prioritizing the health of the child, as opposed to the health of her pregnancy).

Despite the self-understanding of obstetrics to promote reproductive freedom and the empowerment of women by providing them with choice, as well as to be neutral with regard to normative evaluation of disabilities, obstetric technologies such as sonogram can have confusing moral effects.

Birth plan

The previous two sections have shown how technology can shape the common understanding of moral agency and subjectivity as well as the perception of morally significant situations and the moral dimension of the relationship between pregnant woman and fetus. Now we turn our attention to an example that illustrates how women can exercise their autonomy right through the process of birth. The general idea promoted in obstetrics is that the expecting woman can actively moderate labor by determining the mode of delivery and related factors. The so-called birth plan is the upshot of this idea. Administering such kind of advance directive makes sense in a clinical setting in which doctors, nurses and midwives are unknown to the laboring woman. It is an observation that attitudes of expecting women towards birth are strong and vary among them (Lyerly and Little 2010). Since birth is a significant life experience for a woman, it is not only the outcome but also the process that matters to her. Birth carries more meaning than traditional medicine comprehends (Lee and Kirkman 2008). For ensuring a meaningful birth Margaret Little et al. assert it to be essential that the woman's preferences are taken into account, if not ultimately obliged (Little et al. 2008).³

² This fits well to a “risk society” (Beck 1986), “a modern culture characterized by pervasive anxiety about and efforts to colonize the future (Giddens 1991) [...] ‘so risks are a kind of virtual, yet real, reality’ (Beck 1998: 11)” (Wolf 2007: 612).

³ There are certainly limits to flexibility here. The Obstetrics and Gynecology Risk Research Group convincingly argues, for instance, that cesarean delivery on maternal request would not ultimately serve the goal of ensuring autonomy to laboring women (Kukla et al. 2009; Little et al. 2008; Lyerly et al. 2007, 2009; Lyerly and Little 2010). Their argument is that such requests would lead to shifting cultural norms and medical standards towards cesarean, so that ultimately it would become harder to facilitate vaginal deliveries (Little et al. 2008).

Shortcomings of birth plans

The choice of a birth method is limited by individual circumstances and available care provisions. A birth plan can only be written under these substantial constraints, not necessarily reflecting what the woman wishes most, but rather what the woman can afford financially, considering her health insurance plan. What weighs even more is that preferences can change during labor. Until birth, choice is neither static nor final (Kingdon et al. 2009). For this reason, a birth plan cannot work as a manual for a successful, fulfilling birth experience. It cannot substitute for the judgment and responsiveness of health care providers to determine what kind of physical and emotional support the laboring woman needs at the moment, not to mention what interventions she may require. This claim is supported by empirical data. A recent study showed that nursing care is the best predictor for satisfaction with health care (Carlton et al. 2005). In the case of birth it is the “presence”, “devotion” and “dependability” of nurses that contribute to a positive birth experience. “Presence”, “devotion” and “dependability”, however, are not features a woman can ensure through a birth plan, but rely on the personal manner of the health care providers and the relationship they choose to build with the laboring woman.

While the birth plan gives voice to anticipated preferences of the laboring woman and thus brings into sight her specific knowledge about her attitudes towards birth and postnatal care—a development that is surely welcomed—it is still a misleading communicative tool. First of all it can be interpreted as a sign that the woman does not expect to be heard during labor, or that she does not fully trust her providers to act according to her needs, or engage her thoughtfully. Birth plans invoke the language of informed consent and thus appeal to the right of the patient to refuse treatment. But since the choices of the birthing woman might affect the child to be born these choices bear moral weight: namely to do “the right thing” for the child. Again, by entering an informed-consent-interaction, responsibilities for the child are attributed by and large to the pregnant woman: the well being of the child seems to be in her hands.

This moral picture is hazy, not only because the well-being of the child is not entirely under the woman’s control.

Footnote 3 continued

Such a medical mode of child birth would also give way to a normalization of child birth as a surgical process in spite of better knowledge about health risks associated with surgical delivery (Bergeron 2007; Mander 2007; Nilstun et al. 2008). Obstetric skills and knowledge would also be lost, e.g. for vaginal birth of fetus in breech presentation, if caesarians were more routinely performed. Because of these consequences the right to cesarean on demand is widely contested by ethicists.

In this picture the future mother is established as an isolated rational decision-maker, while blanking out the social dimensions and the pressures flowing out from the clinical setting and impinging on individual actions and choices. The empirical study mentioned above, in which the change of preferences during labor was examined, gives an example of this kind of pressure: It shows how nurses may subtly influence decisions e.g. by leaving a consent form on the table saying “Just in case you change your mind” or asking: “Are you ready for your epidural yet?” (Carlton et al. 2005). This gives rise to reconsidering the picture of moral agency embedded in the informed-consent-ideal, and to revise the concept of autonomy which has been conflated with informed consent.

The social dimension of choice and the shared-decision-making model

As the practice of routinely offering prenatal tests demonstrates, an increase in informed-consent-interactions is not a sign that the autonomy of expecting mothers has been improved. To the contrary, informed-consent-interactions constitute pregnant women as decision-makers who bear moral responsibility for her fetus, without paying enough attention to other relational factors and social undercurrents that might affect their choices, or to other moral responsibilities that they have towards themselves. Much literature on the concept of relational autonomy has shed light upon the socially, culturally and historically embedded self and on the social structures and relations that make autonomy possible or impossible (e.g. Christman 2004; Mackenzie 2008; Westlund 2009). Most importantly, preferences concerning prenatal care and the mode of delivery are formed in light of existing social and medical values, standards and expectations, as well as being dependent on class, ethnicity and religion (Rapp 1998). In an analysis of any patient’s decision-making, these values, standards and expectations cannot be ignored. Even if the informed consent process could be corrected in a way such that information is always accurately given and understood, that options are presented in a non-directive, unbiased way, and that women’s preferences are given space to unfold in clinical practice, there is still a gap remaining between envisioned moral agency and its realization in obstetric practice. One way to close this gap is to take the relationality of autonomy seriously.

This might be obvious in the clinical context of delivery. Since the birth process and outcome depend on the responsiveness of nurses, midwives and also obstetricians to the physical and emotional needs of the expecting woman, health care providers are required to engage with the woman (cf. Laslie 1982 for an almost classical critique of the hospital as an unsatisfying social setting for birth).

Good cooperation between medicine and midwifery are also essential to health and a satisfying birth experience (Lee and Kirkman 2008). In order to ensure the autonomy of the pregnant woman (autonomy understood as that she can direct the course of pregnancy and the delivery according to her wishes as much as possible), it is not sufficient that healthcare providers just act as elite experts and comply with some professional ethics code, but rather that they build a trusting and honest relationship with the patient, becoming a committed, supportive, and responsive “professional friend” (Thompson 2003). Trust, not right or consumer choice would be the fundamental basis for this kind of relationship: namely that the pregnant woman can place her trust in health care providers’ intent to care about her needs and preferences, and try to understand her personal situation and her point of view. This is especially crucial at a time when the woman is about to undergo a major life experience (her passage into “motherhood”), because this passage comes with feelings of uncertainty and anxiety (Goering 2009). Also during labor the rationality of a woman is impaired because of strong emotional and physical demands, and she is most in need of support and trustworthy care (Simmonds and Peter 2007). Fostering trust in prenatal care and during birth would lead to a “partnership-model” (Thompson 2003) in which diverse forms of knowledge would be exchanged in a process of shared-decision-making. The evolving relationship between the parturient woman and the healthcare practitioners becomes then the defining feature of informed consent (Spoel 2006). A shared-decision-making process would be more adequate than creating inconsistent responsibilities for the pregnant woman with respect to her fetus.

Conclusion

While feminists have drawn attention to some of the negative social and medical consequences of reproductive technologies, the present article has tried to focus on the moral effects on pregnancy and motherhood of certain prominent obstetric protocols; to pose the question of what moral responsibilities are assigned to pregnant women in the course of their care as such. It was argued that the responsibilities revealed evolve from a deep-seated expectation (or assumption) that “mothers must protect their babies from harm”. In the context of prenatal care and birth this normative assumption is questioned in at least four ways. (1) How can risk be harm? What is the conceptual relation between risk and harm, and how can it be morally relevant for making decisions in prenatal care and during birth? (2) The pregnant woman has a relationship to a fetus, not to a born child. What does “moral wrongdoing” mean with respect to a fetus? (3) The pregnant woman has other

obligations, e.g. to not harm herself. How should she weigh these different obligations against each other? (4) As a future mother the woman is expected to bond with her future child. How is bonding possible if the pregnant woman is supposed to focus on detecting abnormalities in her fetus, and weighing the decision of whether to abort her pregnancy if an abnormality is found?

One way to lift the burden of contradictory expectations that a pregnant woman faces is to move towards a shared-decision-making-model in prenatal care and birth planning. Although certainly welcomed, such a model is not a comprehensive remedy. What remains unchanged is the prominence of informed-consent-interactions in prenatal care and birth planning. These interactions, and the lack of current limits they face, can be interpreted as a “medicalization” (Smeenk et al. 2003) of pregnancy and birth. That is, an expansion of the medical purview to include processes and behaviors that formerly were not considered diseases. This has major consequences. As the anthropologist Kaja Finkler puts it, “[m]edicalization restructures reality by intruding on the world people take for granted. Aspects of behavior or the body that are tacitly understood as normal are transformed into abnormal, disconcerting states, separating the individual from others” (Finkler 2001: 239). The extensive use of often complex diagnostic technologies as standard procedure in obstetric care places essentially all pregnant women into some kind of risk group (as is already the case in the USA) (Seavilleklein 2008), and is a clear sign of this kind of “medicalization” or “disease mongering” (Haucke and Dippong 2011). The goal of screening is to search for risks or abnormalities. Such diagnostic measures lead to coping with risks either by using more tests for reassurance that everything is fine, or by terminating pregnancy. The relationship between the pregnant woman and the fetus is regarded as being unstable, “tentative” (Katz Rothman 1986), and at risk. Since this risk is largely considered to evolve from the woman’s body and behavior, some psychological effects on the self-confidence of the future mother and thus on the quality of her relationship with her future child can occur. Certainly, one cannot turn back the clock and undo these technologies. And this would not be desirable anyway given that technologies such as sonogram have many potential benefits, e.g. (to detect significant or dangerous conditions that can be successfully controlled, like placenta previa).⁴ In some cases obstetric technologies can even support a woman’s agency (understood as the power and presence to preside over her own experience of pregnancy and birth), such as when anesthesia allows for pain relief, or instruments for a safe vaginal birth (Lyerly 2006). What is more, the favoring of a purely “natural birth” as the only way to find autonomy

⁴ For trying to balance harms and benefits of ultrasound cf. McCullough and Chervenak (1994: 201–206).

in birth can put pressure on women who want or need anesthesia and leave them feeling inferior and defective, as well as ashamed. An anti-technological romanticism cannot be the standard.

Although technologies are not *per se* morally “good” or “bad”, they still come with the questionable consequences seen here. Obviously it is in every baby’s best interest to have a competent and comfortable mother, and it is in a mother’s interest for her baby to be healthy (Kukla 2006), but this goal is not easily achieved. One way to attenuate unwanted consequences of technologies in obstetrics is to reconsider medicine’s vast emphasis on informed consent, birth plan and common screening procedures like sonogram—that is, ask if they really help to create a medical moral landscape worth embracing.

Conflict of interest The authors declare that they have no conflict of interest.

Ethical standard This study was funded by Lichtenberg-Kolleg: The Göttingen Institute for Advanced Study in the Humanities & Social Sciences, University of Goettingen, Germany (Fellow-in-Residence 2011). This article does not contain any studies with human participants or animals performed by any of the authors.

References

- Beck, Ulrich. 1986. *Risikogesellschaft. Auf dem Weg in eine andere Moderne*. Frankfurt a.M.: Suhrkamp.
- Beck, Ulrich. 1998. Politics of risks society. In *The politics of risk society*, ed. J. Franklin, 9–22. Cambridge: Polity Press.
- Bergeron, Veronique. 2007. The ethics of cesarean section on maternal request: A feminist critique of the American College of Obstetricians and Gynecologists’ position on patient choice surgery. *Bioethics* 9: 478–487.
- Bister, Milena. 2010. *Soziale Praktiken des Einwilligens: Informed Consent-Verfahren und biomedizinische Forschung im Krankenhauskontext*. Unpublished doctoral dissertation, University of Vienna, Vienna.
- Brakman, Sarah-Vaughn. 2006. Adoption, ART and a Re-Conception of the maternal Body: Toward embodied Maternity. *Hypatia* 1: 54–73.
- Burkart, G. 2002. Entscheidungen zur Elternschaft revisited. Was leistet der Entscheidungsbegriff für biographische Übergänge. In *Elternschaft heute: Gesellschaftliche Rahmenbedingungen und individuelle Gestaltungsaufgaben*, eds. N.F. Schneider and H. Matthias-Bleck, 23–48. Opladen: Leske und Budrich.
- Callahan, Joan. 1995. *Reproduction, ethics and the LAW*. Bloomington: Indiana University Press.
- Carlton, Troy, et al. 2005. Decision making in laboring women ethical issues for perinatal nurses. *Journal of Perinatal and Neonatal Nursing* 2: 145–154.
- Chan, S. and Harris, J. 2008. Enhancement is good for you!: Understanding the ethics of genetic enhancement. *Gene Therapy* 15(5): 338–339.
- Christman, John. 2004. Relational autonomy, liberal individualism and the social constitution of the selves. *Philosophical Studies* 1–2: 143–164.
- Davis, John. 2008. Selecting potential Children and unconditional parental Love. *Bioethics* 5: 258–268.
- Downe, Soo. 2004. Risk and normality in the maternity service. In *Ethics and midwifery*, ed. L. Frith and H. Draper, 2nd ed. Amsterdam: Elsevier Science.
- Duden, B. 2002. Frauen ohne gute Hoffnung (Interview). In *Vom Stammbaum zur Stammzelle: Reproduktionsmedizin, Pränataldiagnostik und menschlicher Rohstoff*, ed. E. Brähler et al., 307–319. Gießen: Psychosozial-Verlag.
- Dworkin, Gerald. 1981. Taking risks, assessing responsibility. *Hasting Center Report* 11: 26–30.
- Faden, R., et al. 1986. *A history and theory of informed consent*. Oxford: Oxford University Press.
- Finkler, Kaja. 2001. The kin in the gene: The medicalization of family and kinship in American Society. *Current Anthropology* 2: 235–263.
- García, E., et al. 2009. Reconsidering prenatal screening: An empirical–ethical approach to understand moral dilemmas as a question of personal preferences. *Journal of Medical Ethics* 7: 410–414.
- García, E., et al. 2011. Women’s view on the moral status of nature in the context of prenatal screening decisions. *Journal of Medical Ethics* 37: 461–465.
- Giddens, Anthony. 1991. *Modernity and self-identity*. Stanford: Stanford University Press.
- Goering, Sara. 2009. Postnatal reproductive autonomy: Promoting relational autonomy and self-trust in new parents. *Bioethics* 23(1): 9–19.
- Hauke, Kai, and Dippong, Natalie. 2011. Legitimationsprobleme moderner Geburtsmedizin. In *Ethik in der Medizin*. Published online: 11 June 2011.
- Hauser-Schäublin, Brigitta. 2010. Manipulierte Substanzen, rekonfigurierte Verwandtschaften: Humantechnologische Prozesse und ihre Bedeutung für Verwandtschaft zwischen Normativität und Flexibilität. In *Verwandtschaft heute, Positionen, Ergebnisse und Perspektiven*, ed. E. Alber et al., 249–277. Berlin: Dietrich Reimer Verlag.
- Hogle, L.F. 2007. Emerging Medical Technologies section. In *The handbook of science and technology studies*, 841–874. Cambridge: The MIT Press.
- Katz Rothman, B. 1986. *The tentative pregnancy: Prenatal diagnosis and the future of motherhood*. New York: Penguin Books.
- Kingdon, C., et al. 2009. Choice and birth method: Mixed-method study of caesarean delivery for maternal request. *BJOG* 7: 886–895.
- Kneuper, Elsbeth. 2005. *Mutterwerden in Deutschland: Eine ethnologische Studie*. Münster: LIT-Verlag.
- Kukla, Rebecca. 2006. Ethics and ideology in breastfeeding advocacy campaigns. *Hypatia* 1: 157–181.
- Kukla, Rebecca. 2005. *Mass hysteria: Medicine, culture and mothers’ bodies*. Oxford: Rowman & Littlefield Publishers.
- Kukla, Rebecca et al. 2009. Finding autonomy in birth. *Bioethics* 23(1): 1–8.
- Laslie, Adele E. 1982. Ethical issues in childbirth. *Journal of Medicine and Philosophy* 7: 179–196.
- Lee, Amy Su May, and Maggie Kirkman. 2008. Disciplinary discourses: Rates of caesarean section explained by medicine, midwifery and feminism. *Health Care for Women International* 5: S448–S467.
- Little, Margaret Olivia. 1996. Procreative liberty, biological connections and motherhood. *Kennedy Institute of Ethics Journal* 6(4): 392–396.
- Little, Margaret Olivia, et al. 2008. Mode of delivery: Towards responsible inclusion of patient preferences. *Obstetrics and Gynecology* 112: 913–918.
- Lyerly, A.D. 2006. Shame, gender, birth. *Hypatia* 1: 101–118.
- Lyerly, A.D. et al. 2007. Risk, value and decision-making around pregnancy. *Obstetrics and Gynecology* 109: 979–984.

- Lyerly, A.D., et al. 2009. Risk and the pregnant body. *Hastings Center Report* 39(6): 34–42.
- Lyerly, A.D. and Little, M.A. 2010. Toward an ethically responsible approach to vaginal birth after caesarean. *Seminars in Perinatology* 5: 337–344.
- Mackenzie, Catrina. 2008. Relational autonomy, normative authority and perfectionism. *Journal of social Philosophy* 4: 512–533.
- Maier, Barbara. 2000. *Ethik in Gynäkologie und Geburtshilfe*. Berlin: Springer.
- Mander, Rosemary. 2007. *Caesarean: Just another way of birth?*. Abingdon: Routledge.
- McCullough, Laurence B., and Chervenak, Frank A. 1994. *Ethics in obstetrics and gynecology*. New York: Oxford University Press.
- McDougall, Rosalind. 2007. Parental virtue: A new way of thinking about the morality of reproductive actions. *Bioethics* 4: 181–190.
- McLeod, C. 2002. *Self-Trust and Reproductive Autonomy*. Cambridge, Mass: The MIT Press.
- Nilstun, Tore, et al. 2008. Caesarean delivery on maternal request: Can the ethical problem be solved by the principlist approach? *BMC Medical Ethics* 9: 1–8.
- Rapp, Rayna. 1997. Real-time fetus: the role of sonogram in the age of monitored reproduction. In *Anthropological interventions in emerging sciences and technologies*, ed. Gary Lee Downey, and Joseph Dumit, 31–48. Santa Fe: Cyborgs & Citadels.
- Rapp, Rayna. 1998. Refusing prenatal diagnosis: The meanings of bioscience in a multicultural world. *Science, Technology and Human Values* 23: 45–70.
- Samerski, Silja. 2002. *Die verrechnete Hoffnung: Von der selbstbestimmten Entscheidung durch genetische Beratung*. Münster: LIT-Verlag.
- Schnegg, M., et al. 2010. Verwandtschaft heute: Positionen, Ergebnisse und Forschungsperspektiven. In *Verwandtschaft heute, Positionen, Ergebnisse und Perspektiven*, ed. E. Alber et al., 7–44. Berlin: Dietrich Reimer Verlag.
- Seavilleklein, V. 2008. *The Values and Practice of Prenatal Screening in Canada*. Canadian theses, Dalhousie University, Halifax.
- Simmonds, A., and Peter, E. 2007. Understanding the everyday moral practices of midwives and intrapartum nurses. *The Canadian Journal of Nursing Research* 4: 117–129.
- Sismondo, S. 2004. *An Introduction to Science and Technology Studies*. Malden: Wiley-Blackwell.
- Smeenk, A.D.J., et al. 2003. Medicalisation and obstetric care: An analysis of developments in Dutch midwifery. *Medicine, Health Care and Philosophy* 2: 153–165.
- Spoel, Philippa. 2006. Midwifery, Consumerism and the Ethics of Informed Choice. In *Bordering Biomedicine: Interdisciplinary Perspectives on Health, Illness and Disease*, eds. L. Twohig and V. Kalitzkus, 198–213. Amsterdam: Rodopi.
- Stone, Linda. 2003. Introduction to contemporary directions in kinship. In *Kinship and family: An anthropological Reader*, eds. Robert J. Parkin and Linda Stone, 331–341. Malden: Wiley-Blackwell.
- Thompson, Faye E. 2003. The practise setting: Site of ethical conflict for some mothers and midwives. *Nursing Ethics* 6: 588–601.
- van den Daele, Wolfgang. 1988. Der Fötus als Subjekt und die Autonomie der Frau. Wissenschaftlich-technische Optionen und soziale Kontrollen in der Schwangerschaft. In *Frauensituation: Veränderungen in den letzten 20 Jahren*, ed. Uta Gerhardt and Yvonne Schütze, 189–215. Frankfurt/Main: Suhrkamp.
- Verbeek, Peter-Paul. 2008. Obstetric ultrasound and the technological mediation of morality: A postphenomenological analysis. *Human Studies* 1: 11–26.
- Waldby, Catherine. 2002. Stem cells, tissue cultures and the production of biovalue. *Health* 6(3): 305–323.
- Westlund, Andrea C. 2009. Rethinking relational autonomy. *Hypatia* 4: 26–49.
- Young, Iris Marion. 1984. Pregnant embodiment: Subjectivity and alienation. *Journal of Medical Medicine and Philosophy* 9: 45–62.