Maternal bodies and medicines: a commentary on risk and decision-making of pregnant and breastfeeding women and health professionals

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Abstract

Background: The perceived risk/benefit balance of prescribed and over-the-counter (OTC) medicine, as well as complementary therapies, will significantly impact on an individual's decision-making to use medicine. For women who are pregnant or breastfeeding, this weighing of risks and benefits becomes immensely more complex because they are considering the effect on two bodies rather than one. Indeed the balance may lie in opposite

Risk for pregnant and breastfeeding women

Our modern society has become increasingly concerned with understanding, calculating, managing, reducing or eliminating the risks associated with everyday life [2,3] and it is within this context that pregnant and breastfeeding women have a social and moral responsibility to manage risk [4-6]. The perceived risk/benefit balance of prescribed and OTC medicine, as well as complementary therapies will significantly impact on an individual's decision to use medicine. For the maternal body – women who are pregnant or breastfeeding – this weighing of risks and benefits becomes immensely more complex because they are considering the effect on two bodies rather than one. Indeed the balance may lie in opposite directions for the mother and baby/fetus.

Pregnancy and breastfeeding, while inherently very private events, attract vast public attention and scrutiny. Deborah Lupton wrote that "the pregnant woman is surrounded by a complex network of discourses and practices directed at the surveillance and regulation of her body" and that "risk is a central discourse" [7] (p. 60). Helman pointed out that all cultures share beliefs about the *vulnerability* of the mother and fetus during pregnancy and that this usually continues throughout the early postpartum or lactation period" [8] (p. 46, original emphasis). Medical technology has embraced this vulnerability and the use of technologies, such as ultrasound, has meant that the fetus has increasingly acquired an individual identity that is separate from the mother and that the intensification of the health and well-being of the fetus has sometimes resulted in the mother being viewed primarily as the "maternal environment" [7] (p. 62).

Yet, despite the separation of the mother and fetus, the mother is responsible for her fetus' health and well-being. "Her body therefore, is constructed as *doubly* at risk and she is portrayed as *doubly* responsible, for two bodies" [7] (p. 63, our emphasis). In addition, Lupton points out that pregnant women are expected to be extremely attentive in monitoring their bodies to ensure the health of their babies is not threatened in any way [7]. This self-regulation is extended to include the expectation that pregnant women and one could argue "good mothers", are vigilant in their attendance at antenatal appointments and undergo all medical tests and examinations suggested by their health care professionals.

None of this is surprising when one considers the thalidomide disaster of the late 1950s and early 1960s. Pregnant women were prescribed thalidomide for morning sickness until it was recognised that it was a potent teratogen resulting in deformities in thousands of babies [9]. Since this time, women have been given strong messages about the importance of maintaining their health and avoiding toxins that can transfer from mother to baby. Pregnant women are even cautioned against simple analgesics such as paracetamol. Deborah Lupton details how:

> "women are told that as well as avoiding any consumption of alcohol and tobacco (and illicit drugs such as marijuana and cocaine), they have been advised to give up tea, coffee and cola drinks, avoid certain sugar substitutes, avoid spa baths, be wary of microwave ovens, not use electric blankets, avoid having diagnostic x-rays, be careful in using household cleaning products and insecticides and not take prescription or over-the-counter therapeutic drugs (even headache pills) if possible" [7] (p. 64).

The phenomenon of "intensive mothering" was identified by Sharon Hays [10] whereby women must mother their children intensively to ensure they are seen to be "good mothers". More recent work has positioned this phenomenon as contemporary motherhood [11,12] and suggests it still holds considerable power in societies such as Australia, the US and the UK [13]. Intensive mothers are also risk averse in their parenting approach [5] whilst recognising that "professional support" is essential to risk management [4].

The "good mother"

Most pregnant and breastfeeding women are significantly influenced by the discourse of the "good mother" (and, in turn, intensive mothering) which is widely discussed in the research literature [14-18]. In essence, good mothers protect their babies from harm and put their children's needs before their own [19] – which includes pregnant women. On the other hand, "responsible" women take and act on medical advice – they should take the medicine as directed by their health professional. This is the inherent conflict in medicine use for maternal bodies. Women in our society feel that they are ultimately responsible for producing a "perfect baby" [20,21] and presumably feel responsible for maintaining optimum infant health by providing breast milk free of possible contaminants such as medicines. Others have taken this further, arguing the rights of the baby or fetus are always prioritised above the mother [22,23]. This has been linked to the shift in western cultures during the middle of the 20th century where the optimum way to raise children requires a "good mother" who anticipates and adapts to their children's needs [6,24-26].

Once pregnancy is confirmed, women are faced with a multitude of decisions and risk assessments. They must decide what to eat (and not eat), what to drink (and not drink), what tests they will undergo (and what actions

will be taken if test results indicate abnormality), what type of birth they want, how they will feed their infant, and so it goes on. However, in making these decisions, women become solely responsible for the welfare of their fetus. As Lupton writes, “there is no such thing as ‘no risk’ in pregnancy, but it is ultimately the woman’s

ealth professionals' perspective

Health professionals' perception of risk

Health professionals must also assess risk for their pregnant and breastfeeding patients. Lyerly and colleagues found that risk perception affects medical decision-making in pregnancy, pointing out that the tendency for health care professionals has been to "pursue zero risk to the fetus, independent of the absolute size of the risk, of competing considerations, or of recognition that fetal risk exists in other acceptable contexts" [49] (p. 981). They cite the example of vaginal birth after caesarean (VBAC), where caesarean section may be promoted in

Planned Behaviour as a particular decision-making trajectory and suggested that the decision-making takes place in a complex framework [20]. They plan to test the framework using ethnography and choice modelling research [20]. Pregnant women considering antenatal testing are often confused by the estimates of risks they are given: the risk of having a baby with Down syndrome, the risk for miscarrying secondary to testing, and so on [20]. On the other hand, how much harder would it be to make decisions when the potential risk of taking medicine while pregnant or breastfeeding is not quantified? Furthermore, the risks of the alternatives are not stated; the potential hazards of infant formula are rarely considered [60,61]. Often, formula feeding is such a cultural norm that health professionals and families have trouble recognising that this is an artificial food, potentially contaminated with bacteria [61] and potentially leading to adverse child health outcomes [62].

Public health discourse has increasingly framed personal health choices as social and moral issues [6,63] and as one's own responsibility to sustain one's health [2,3,64]. We would extend this to pregnant and breastfeeding women and suggest that many women now feel responsible for producing and maintaining a healthy

conjunction with her family and consumer advocates [69]. Women may wish to play a more active role in decision-making (the "patient-empowerment model", rather than the biomedical-educational model) [70]. Previous research has found that consumers value information that enables "an informed choice promoting their autonomy; [consumers reported that] it was reassuring and reduced concern, conflict and anxiety about whether the medicine was the right one for them; and it gave them confidence in taking medicines" [70] (p. 115) and this may also be true for pregnant and breastfeeding women.

Summary

Health research in general focuses on the mother *or* the baby (usually it is the mother who gets lost). The *complexity* of living in a body where one's actions impact on another body has not been recognised and is under-researched. We are calling for the development of research that focuses on the maternal body. This is important because the themes of "purity" in pregnancy [71] and breastfeeding [58], seem to be gaining momentum and increasing people's anxiety about what the maternal body is exposed to.

Women must deal with competing interests (hers and her baby's) when making decisions about medicine use in the pregnant and lactating body. However, when making such decisions, pregnant and breastfeeding women rely not only on the expert knowledge of their health care professionals but on their own experiences *ire*

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