



IATROGENIC ANXIETY IN MATERNITY CARE

Are we contributing to the problem?

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- How has your practice as a maternity care provider changed in the last 20 to 40 years? What do you do differently now than you did “in the old days”?



Significant changes in the area of risk prediction for maternity/neonatal complications in the last 30 years

- Increased patient education and informed consents about risk factors for complications
- More risk factors identified resulting in more management decisions based on risk prediction leading to more medical interventions
- Routine USs and NSTs/AFIs for low-risk pregnancies
- Screening tests vs. diagnostic tests
- Genetic counseling for low-risk pregnancies



Increased influence of risk prediction as a framework in maternity care

- Potential for these changes to increase a pregnant woman's anxiety about her baby's safety and concerns about her birth experience
- Iatrogenic anxiety

Anxiety/Fear and birth outcomes- Incidence and Causes (Otley 2011)

- 80 % have common childbirth anxieties, 20% express intense fear
- Causes: Negative stories, fear of pain, lack of trust in maternity care givers, feeling excluded from decisions, depression, low self-esteem and self-efficacy, younger age, lower education, poorer social network, sense of powerlessness and losing control during delivery

Effects of childbirth fear/anxiety on maternity experience- increase in:

- Emergency cesarean deliveries (Laursen 2009) n= 25,297
- Dystocia or protracted labors
- Longer labors (Adams 2012) n=2206
- Use of epidurals, negative birth experiences, post partum emotional instability and a sense of personal failure (Otley 2011)

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- The dance between utilizing technology and research results to predict the chance of risk verses increasing pregnant women's anxiety about childbirth and the safety of their babies.
 - What is the relationship?

Common events during pregnancy that have potential to cause iatrogenic anxiety

- Genetic screening
 - Anxiety in women with elevated first trimester screens -Qualitative study (Georgsson 2006)
 - 4 true positives for Down Syndrome
 - 20 false positives
 - Strong anxiety reactions about the future

Common events during pregnancy that have potential to cause iatrogenic anxiety cont.

- (Fisher 2011) part of British organization that provides support to parents throughout PN screening and testing. National Helpline.
 - 50% increase in calls from women with extended first-trimester screening
 - Internet as an information source

Common events during pregnancy that have potential to cause iatrogenic anxiety cont.

- US/NST

- People commonly choose to do routine USs to be reassured that all is normal. Not prepared to face potential abnormalities. (Garcia 2002)
- If US scans are normal anxiety decreases, if abnormal it increases (Larsson 2009) (Api 2008)

Common events during pregnancy that have potential to cause iatrogenic anxiety cont.

- Soft markers
 - Minor anomalies on USs that may indicate a chromosome abnormality
 - Short-term anxiety when patients have to deal with them that usually resolves later in pregnancy (Watson 2002) (Hoskovec 2008)
 - After the birth of healthy babies women described range of conflicting emotions

Common events during pregnancy that have potential to cause iatrogenic anxiety cont.

- Education about risk factors
 - Exs:AMA, Obesity, Family hx of DM, Hx of cesarean
- Diagnoses with potential for complications
- Informed consents
 - Ex:AROM

Evidence based research on the relationship of risk prediction and iatrogenic anxiety

- Terms used in literature search
 - Risk perception
 - Risk communication
 - Anxiety about childbirth
 - Iatrogenic anxiety

Evidence based research on the relationship of risk prediction and iatrogenic anxiety cont.

- Women approach risk perception subjectively while health professionals present it objectively (Carolan 2008)
 - Risk communication as a process of interaction to develop a common understanding rather than just a delivery of information (Hampel 2006)

Evidence based research on the relationship of risk prediction and iatrogenic anxiety cont.

- Predictors of perception of pregnancy risk
 - Pregnancy related anxiety , maternal age, medical risk, perceived internal control, gestational age (Bayrampour 2013)
 - 4 themes: Self-image, history, healthcare, “the unknown” (Heaman 2004)

Evidence based research on the relationship of risk prediction and iatrogenic anxiety cont.

- Being labeled “high risk” negatively effects women’s psychosocial state (Stahl 2003)
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- “High risk women search for reassuring information leading to a cycle of more testing and surveillance that may or may not be reassuring. ((Carolan 2008)

Evidence based research on the relationship of risk prediction and iatrogenic anxiety cont.

- Women receiving midwifery care have less fear than those receiving care from obstetricians (Christiaens 2011)
- Patient tendency to over-estimate risk in pregnancy (Robinson 2011)

Empirical evidence on the relationship of risk prediction and iatrogenic anxiety

- Does educating patients about their risk factors, informed consents, antenatal screening, US surveillance and basing management decisions on risks increase iatrogenic anxiety?



Maintaining an accurate perception of risk as a provider

- Our perception of risk in any situation effects:
 - Our management decisions and actions
 - How we communicate about the situation with the patient verbally and non-verbally
 - How we communicate with other providers about the situation

Maintaining an accurate perception of risk as a provider cont.

- Differentiating between:
 - Dx's that definitely have long term neonatal or maternal morbidity/mortality
 - Dx's that don't cause damage unless complications occur

Maintaining an accurate perception of risk as a provider cont.

- Dx's with long term morbidity/mortality
 - 1. Congenital abnormalities
 - 2. Stillbirth
 - 3. Complications from the following conditions
- Dx's – no damage unless complications occur
 - 1. Diet controlled GDM/ Shoulder dystocia
 - 2. Gestational hypertension/Pre eclampsia
 - 3. Oligohydramnios
 - 4. GBS positive
 - 5. Category 3 fetal heart tones
 - 6. Post partum hemorrhage

Maintaining an accurate perception of risk as a provider cont.

- AIGDM in antepartum who stays in good glucose control with diet - statistical risks that she could have:

Macrosomia	12% (Hawkins 2008)
Shoulder dystocia	3% (Magee 1993)

Maintaining an accurate perception of risk as a provider cont.

- Statistical chances of neonatal outcomes if shoulder dystocia is occurring

No fetal injuries	79%
Any fetal injury	17.5% (Gherman 1998) To 25% (Mehta 2007) Average 21%
Erb/Brachial Plexopathy-transient	78.95% (Gherman 1998)
Erb/Brachial Plexopathy-persistent	1.4% (Mehta 2007)
Clav/Humeral fracture	19.3% (Gherman 1998)
Death	0.35% (Gherman 1998)

Maintaining an accurate perception of risk as a provider cont.

- Statistical chances of neonatal outcomes in AIGDM 2nd tri. as a result of shoulder dystocia

No fetal injuries	99.04%
Any fetal injury	0.0063%
Erb/Brachial Plexopathy- transient	0.0049%
Erb/Brachial Plexopathy- persistent	0.0000882% (<1 in 10,000)
Clav/Humeral Fracture	0.0012%
Death	0.00002205% (<1 in 10,000)

Suggestions to address the problem

- Starts with providers maintaining an accurate perception of risk
- Providers striving to minimize the anxiety they might be generating when utilizing risk prediction interventions
 - Be aware of the potential for an emotional side effect

Suggestions to address the problem cont.

Be sensitive to manipulating patient to comply with management suggestions by exaggerating risk of undesired outcome.

- Whose choice is it?

Quote statistical numbers instead of “increased risk”.

Need for standardized list of statistical risks

Clarify for patients that pregnant women without their diagnosis can also have the same complications

Suggestions to address the problem cont.

- Use the phrase “there is a statistical chance of...” instead of “you are at risk of...”.
- Discuss with the patient if they want to know that they are at increased risk
- Assist patients in understanding the numbers part when you quote a statistical risk
- Support patients to respond to increased risk with less emotional magnification and more focus on the high chance of a normal pg and baby.

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- Any other suggestions about what we could do to minimize the occurrence of iatrogenic anxiety?

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- If anyone would like a copy of the powerpoint I would be happy to email it to you. Contact me at:

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