

International Federation of Professional Abortion and Contraception Associates

Measurement of Unintended Pregnancy and its Importance for Predicting Negative Life Impacts

Abigail R.A. Aiken, MD, MPH, PhD LBJ School of Public Affairs University of Texas at Austin



Disclosures

No conflicts of interest or disclosures

Acknowledgements

Christine Dehlendorf, Sonya Borrero, and Lisa Callegari for ongoing collaboration

Society of Family Planning and National Institutes of Health



Current Estimates of Unintended Pregnancy

United States
2011
45% of pregnancies
mistimed or
unwanted

United Kingdom
2010-2012
1 in 6 pregnancies
unplanned

France
2010
1 in 3 pregnancies
unplanned

Uganda
2011
55% pregnancies
mistimed or unwanted



Sources: Finer & Zolna 2016, Wellings et al. 2014, Moreau et al 2014, Guttmacher Institute 2014

Estimation in the US and in Many Developing Countries

EG-6: Right before you became pregnant (with your (NTH) pregnancy which ended in (DATE)/this time), did you yourself want to have a(nother) baby at any time in the future?

value	label	Total
.	INAPPLICABLE	3530
1	Yes	3939
5	No	1880
6	Not sure, Don't know	156
8	Refused	28
9	Don't know	10
	Total	9543

EG-10: So would you say you became pregnant too soon, at about the right time, or later than you wanted?

value	label	Total
	INAPPLICABLE	1980
1	Sooner	2901
2	Right time	4010
3	Later	565
4	Didn't care	80
8	Refused	1
9	Don't know	6
	Total	9543



NSFG and DHS are Timing-Based

Unintended Pregnancies





Unwanted
Woman wanted no more
children in the future

Mistimed

Woman wanted more children in the future but did not want to be pregnant then



London-Measure of Unplanned Pregnancy (LMUP)

10-12 planned4-9 ambivalent0-3 unplanned

Source: Barrett et al 2004



Box 1 Questions of the original version of the London Measure of Unplanned Pregnancy (24)

Question 1. At the time of conception:

0 Always used contraception

1 Inconsistent use

2 Not using contraception

Question 2. In terms of becoming a mother:

0 Wrong time

1 OK but not quite right

2 Right time

Question 3. Just before conception:

0 Did not intend to become pregnant

1 Changed intentions

2 Intended to get pregnant

Question 4. Just before conception:

0 Did not want a baby

1 Mixed feelings about having a baby

2 Wanted a baby

Question 5. Before conception:

0 Had never discussed children

1 Discussed but no firm agreement

2 Agreed pregnancy with partner

Question 6. Before conception:

0 No actions

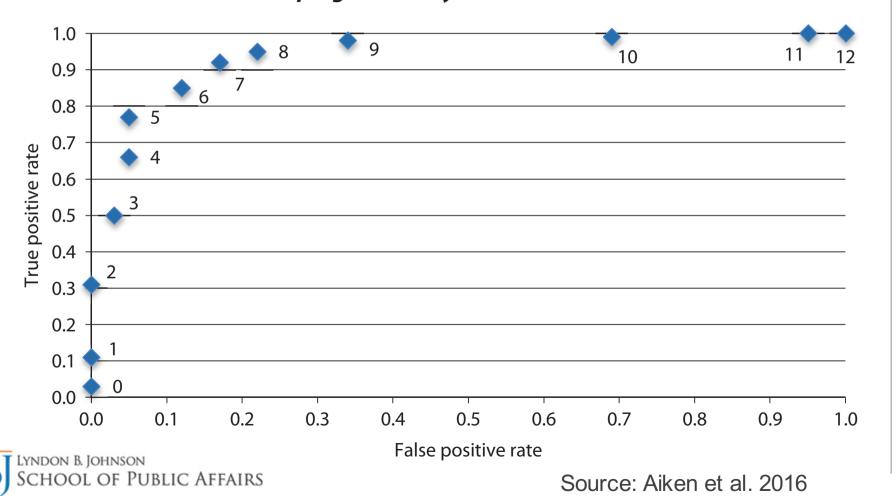
1 Health preparations (1 action*)

2 Health preparations (≥ 2 actions*)

*Health preparations included the following actions: taking folic acid supplements, stopping or reducing smoking, stopping or reducing alcohol consumption, healthy eating, and seeking medical advice before conception.

Maximizing Congruence Between LMUP and Timing-based Measure

FIGURE 1. ROC curve showing how each classification of LMUP scores relates to the identification of unintended pregnancies by the TMUP



FECOND Study Measure

Had you planned this pregnancy?

- Didn't think about it
- Not at all
- Later
- At that time
- Sooner

Had you wanted this pregnancy?

- Didn't think about it
- Not at all
- Later
- At that time
- Sooner



Source: Moreau et al. 2014

Limitations of Current Estimates

- Some take into account only timing-based intentions
- Cross-sectional
- Retrospective
- Likely subject to social desirability bias
- Pregnancies ending in abortion under-reported
- Based only on women's accounts
- In real life, women rarely describe their pregnancies in accordance with a binary distinction ("intended" vs. "unintended")



Predictive Power of Estimates of Unintended Pregnancy

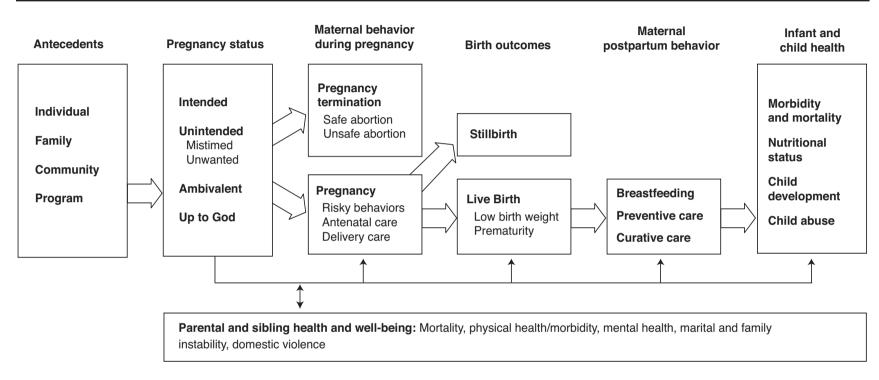
But... much of what we do in research, policy, and practice depends on these estimates!

So...what evidence is there that unintended pregnancy leads to adverse health outcomes for women and neonates/infants/children?



Methodological Challenges

Figure 1 Potential effects of unintended pregnancy on infant, child, and parental health outcomes



Confounding influences

SCHOOL OF PUBLIC AFFAIRS

LYNDON B. JOHNSON

- Abortions usually not considered
- Variation in UP measurement
- Measurement nearly always retrospective and timing-based

Source: Gipson et al. 2008

Evidence for Adverse Infant/Neonatal Outcomes

Evidence of increased risk

Very little

Infant mortality

Inconclusive (mixed or weak)

Low birth weight

Pre-term birth

Reduced infant vaccination

Delayed child development

Moderate to Strong

Reduced initiation of breastfeeding

Poor child nutritional status



Source: Gipson et al. 2008

Köst & Lindberg 2015

Evidence for Adverse Outcomes/Behaviors for Women

Evidence of increased risk

Very little

Maternal mortality

Inconclusive (mixed or weak)

Maternal drinking or drug use

Reduced no. of pre-natal care visits

Mental health difficulties

Intimate partner violence

Moderate to Strong

Unsafe abortion

Delayed recognition of pregnancy

Delayed initiation of pre-natal care



Source: Gipson et al. 2008. Kost & Lindberg, 2015

Many Outcomes Remain Understudied

- Obstetric Outcomes
- Birth and postpartum experiences
- Life impacts for women
- Any kinds of outcomes for men



Evidence for Rational Behavior and Positive Outcomes



The Socioeconomic Consequences of Teen Childbearing Reconsidered

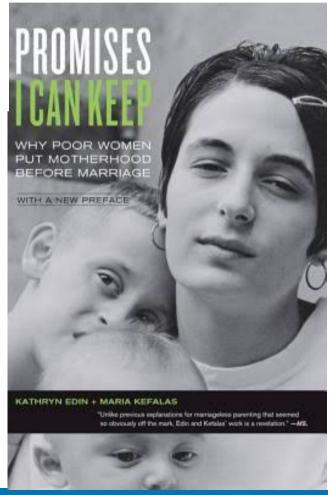
Arline T. Geronimus and Sanders Korenman The Quarterly Journal of Economics Vol. 107, No. 4 (Nov., 1992), pp. 1187-1214

Published by: Oxford University Press

Stable URL: http://www.jstor.org/stable/2118385

"Honestly, although she wasn't at all planned, I think my baby girl saved me. When I think what I would be doing now if she had never have come along..." Aiken et al. 2016





Where to go from here?

- Are we measuring the right construct?
- What other dimensions of women's perceptions of pregnancy might be important in predicting adverse outcomes?



A Multidimensional Concept

Plans: Decisions about when to get pregnant

and formulation of actions

Intentions: Timing-based ideas about if/when to

get pregnant, sometimes includes

"wants"

Feelings: Emotional orientations towards

pregnancy

Desires: Strength of inclination to get pregnant or

avoid pregnancy

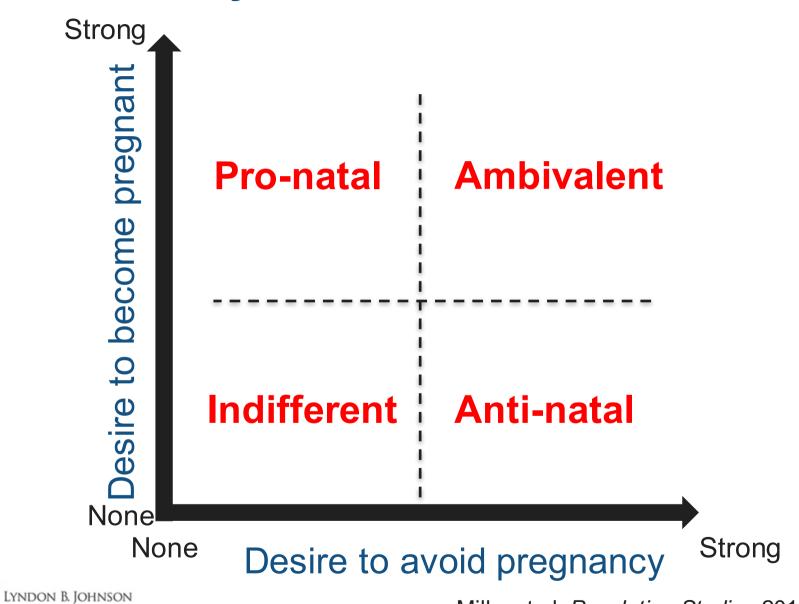
A Multidimensional Concept

Plans ≠ Intentions ≠ Desires ≠ Feelings

- All different concepts
- Women may find all or only some meaningful
- Often appear inconsistent with each other



Desires May be Ambivalent or Indifferent



SCHOOL OF PUBLIC AFFAIRS

Miller et al. Population Studies 2013

Ambivalent and Indifferent Desires

"Sometimes I probably want to get pregnant when I'm 22 or 27... or probably soon. Who knows? Probably when my daughter starts walking, maybe."

> "I already got a kid so you know I'm not opposed to be having children. If it happens, it happens.... I'd prefer we don't have children right now but if it happens, okay."



Gomez et al. Young Couples Study 2016

Unintended May Still be Welcome

"Another pregnancy is definitely not the right path for me and I'm being very careful with birth control. But If I somehow ended up pregnant would I embrace it

and think it's for the Absolutely."

Aiken et al. 2015 Social Science & Medicine



"I don't want more kids and was hoping to get my tubes tied. We can't afford another one. But if it happened I'd still be happy. I'd be really excited. We'd rise to the occasion, nothing would really change."

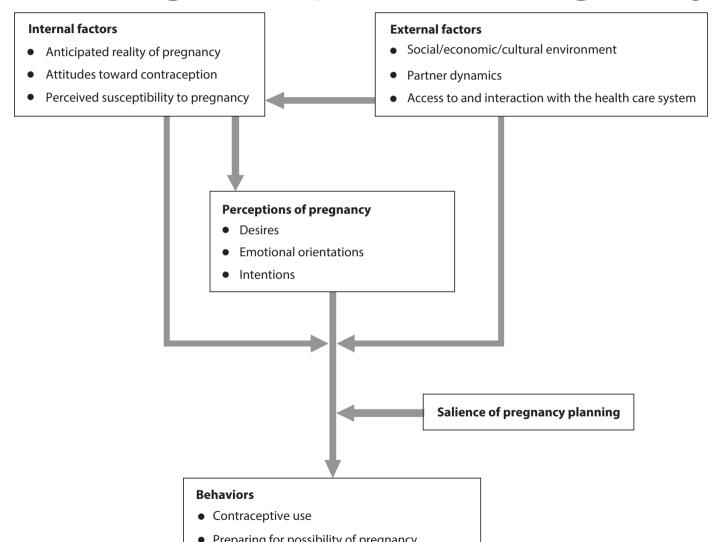
Formulating Plans or Intentions May be Irrelevant

"If you are meant to have a kid, you are meant to have a kid. Why take something to prevent it?"

"Nobody can really plan for a pregnancy, like, you could try but a lot of people that wanna get pregnant don't get pregnant...then there's a lot of people that don't want to get pregnant and it just happens."



A Woman-Centered Approach to **Assessing Perceptions of Pregnancy**



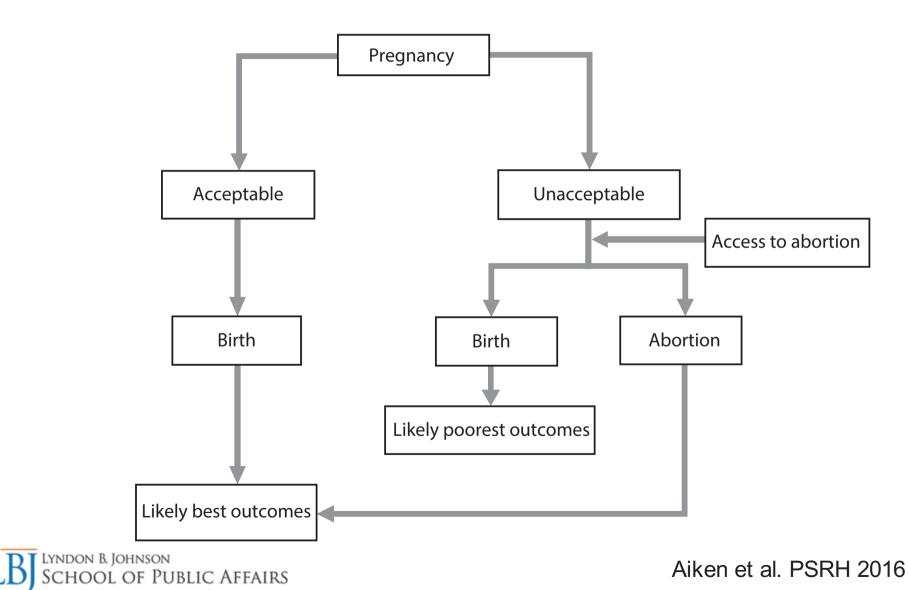


• Preparing for possibility of pregnancy

• Seeking additional knowledge and information

Aiken et al. PSRH 2016

Linking Women's Perceptions to Outcomes



Conclusions

 Complicated, conflicting, and fluctuating pregnancy desires are common, normal, and difficult to measure in retrospective surveys

 Evidence for a relationship between unintended pregnancy, measured using timing-based constructs, and adverse health outcomes is weak overall



Conclusions

Dimensions beyond timing-based intentions may prove better predictors: desires, emotional orientations, anticipated life impacts etc.

Both public health and individual rights approaches are important, but they will be strongest when integrated through a women (and men)-centered approach

