OUTCOMES OF COMMUNITY CLINIC-BASED DELIVERIES IN A WISCONSIN AMISH COMMUNITY

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Background

- Amish culture and customs
- Amish approach to health care
- The Amish and childbirth
- LaFarge Birthing Center
The Amish
Amish culture and customs

- Wear plain clothes
- Do not own cars, telephones, or use electricity
- Most have farming and/or trade occupations
- No education past 8th grade
- Marry within the Amish community
- Strong disapproval of having children out of wedlock (low teen pregnancy rate)
- Use of birth control and abortion prohibited
- Most women have many children (mean=7-8)
Amish approach to healthcare

- Do not have health insurance
- Do not participate in government programs
- Seek care that will minimize cost
- Do not sue for medical malpractice
- Little focus on preventive medicine
- Ability to eat and do work = healthy
- Many children not immunized
- Reliance on alternative medicine and herbal remedies
The Amish and Childbirth

- Risk factors include:
  - Short birth intervals
  - More births to older women
  - Grandmultiparity
  - High-fat, high-sugar diet
  - Obesity
  - Psychologic stress
  - Lack of medical insurance
  - Few prenatal visits
  - Initiate prenatal care late, especially with increasing parity
  - High rate of at-home births attended only by laymidwives
The Amish and Childbirth

Benefits include:

- Low use of cigarettes and alcohol
- Low teen pregnancy rate
- Role of mother highly valued
- Extensive social network for informational and emotional support
The LaFarge Birthing Center

• Established in 1993 as an alternative to home or hospital birth
• Located in Western Wisconsin
• 16 miles from nearest hospital – Vernon Memorial Hospital in Viroqua, WI
• Provides 24 hour per day obstetrical services
• Staff includes two family practice physicians and a physician’s assistant/midwife
To examine birth experience and maternity care outcomes at a clinic specializing in management of Amish women with high-risk pregnancies
Methods

- Review of literature on Amish culture and use of health care
- Examined hand-written records of 938 Amish and Mennonite deliveries from 1993-2010
- Outcome measures included maternal and fetal outcomes and complications, mode of delivery, number of prenatal visits, infant weight, APGAR scores, and use of labor augmentation
Maternal Demographics

Mean age of women delivering at clinic = 29 years
Mean age at first birth = 22.5 years
Maternal Demographics

• This was first live birth for 21% of moms and second birth for 15%

• Mean number of previous births was 3.9 (median is 3)

• 25% of women had 7 or more previous live births
Use of Prenatal Care

- Mean number of prenatal visits $\approx 2.5$
- Most women in the US have 10-15 prenatal visits
Time spent in the birth center from arrival to discharge

- Average time from delivery to discharge ≈ 2.5 hours
- Most women in the US stay in the hospital 24-48 hours after a normal vaginal delivery
Transfer In and Hospital Transfers

- 88 patients (9.5%) transferred to birth center after unsuccessful home birth attempt
  - 90% of these patients had a successful vaginal delivery at the birth center.
- 7.6% of patients transferred from birth center to hospital due to malpresentation, failure to progress, preeclampsia, postpartum hemorrhage, etc.
  - Of the 69 malpresentations encountered at the birth center, 45 went on to deliver in the clinic (65%)
Perinatal Deaths

- Perinatal death = fetal deaths + neonatal deaths
  - Fetal deaths: ≥ 20 weeks gestation and death before delivery
  - Neonatal deaths: live at birth but death < 28 days

- Clinic rates
  - 15 fetal deaths (16.2/1000); 5 neonatal deaths (5.4/1000); total of 20 out of 938 births (21.3 per 1000)

- Wisconsin 2008 rates
  - Fetal death rate 5.3/1000; neonatal death rate 4.6/1000; total 9.9/1000
Results

- 42 postpartum hemorrhages (4.5% of all births)
  - Four transferred to hospital
- 3.9% of births resulted in a cesarean section
- 8.7% of all births were Vaginal Births after Cesarean (VBACs)
  - 88 out of 92 (95.6%) primary and non-primary VBACs were successful
Conclusions

- Positive maternal and fetal outcomes in a low-cost, low-technology setting
- Low cesarean rate and high VBAC rate with few complications is informative to all birthing settings
  - US Cesarean section rate is ~33%
  - Only ~8% of women in US who have had a prior c-section go on to have a successful vaginal birth
- LaFarge Birthing Center can serve as a model for other centers within other Amish communities and in settings within and outside the US with limited access to medical services and technology
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References