

Towards user-centered digital childbirth education



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Who is in the audience?

- Who work with pregnant women? Nurses, midwives, doctors, doulas?
- Engineers?
- Researchers?

Background: Childbirth Education in Finland

- Prenatal clinics in Finland
 - 99% of the families attend the free prenatal services
 - Childbirth education is the mandatory task for the prenatal clinics
- Problems with childbirth education (CBE)
 - Too little time for CBE. Only 1-2h (part of family education)
 - One time shot - one evening class during your first pregnancy
- One model (fits all)?
 - Families are different
 - Circumstances are different
 - Perceptions of birth are different

Midwives: The state of the current childbirth education

- 80% of the midwives think that the mothers are not prepared enough for birth.
 - 51 hospital midwives responded for a questionnaire about how they feel about childbirth education
 - 86% agreed that childbirth education affects childbirth
 - 80% said that families do not receive enough information about childbirth prior coming to give birth
- We need to improve childbirth education

Why did families participate in the series of studies?

- Could not make it to the prenatal class for childbirth education
- Time was not suitable
- Second time mother - no class available from the prenatal clinic
- Second time around and now I know I need to prepare
- Trauma from the first birth
- Prenatal class was just a list of medical pain relieve
- Interested in natural pain relief
- Wanted to know more than the horror stories on the internet
- No other childbirth education classes in town

We need to make childbirth education more user-centered

Can we use technology to improve the situation?

- Utilize the possibilities of technology
 - time/location free
 - communication
 - Flipped learning / Flipped classroom
- Fix the problems
 - lack of human contact
 - ways to ask questions and discuss
 - communication
- Have **users** involved in the making
 - This study used iterative User-Centered Product Development (UCPD) methods from Usability/User Experience studies.
 - Social participation

We can improve CBE with technology, but we cannot leave it for the technology!

Birth ABC - Synnytyksen ABC

- Goal: To make user-centered childbirth education
 - Accessible for all
 - time, location, stage of pregnancy, no of pregnancies, different families (single, same sex)
 - User decides what parts of the class they want to take
 - For example natural or medical pain relieve
 - Research based information from natural childbirth to cesarean section
- First implemented childbirth education curriculum online
- Iterative development
 - User groups participated in study rounds (pregnant women, prenatal nurses, midwives)
 - Questionnaires, Focus groups, Facebook group + online class, messages, calls, chat...
 - Improvements implemented each round

Variety of ways to take Birth ABC - Synnytyksen ABC

- Possibilities
 - evergreen online class (with communication possibilities)
 - timetabled class (online class and email) for 5 weeks or 5 days, supported by closed FB group
 - personal childbirth education + online class
 - doula service + online class
 - prenatal service + online class
- Communication Communication and Communication!
 - Chat, email, phone, Facebook, Messenger, Skype, Hangouts... Newest: WhatsApp
 - What the parents are using. World changes and the CBE should follow, not the other way around
 - Reply within 24h. Average response time 5 min.
 - Online immediate response when possible. More likely, when there is an childbirth educator dedicated to respond.

Future research

- Develop the content further, next round with OBs
- Utilize new technologies as they emerge
- Study the communication, involvement and participation during the class
- Study in big scale. How childbirth education impacts birth outcomes?

Call for research partners

- Interested to participate in a larger study where Birth ABC is used as a tool
- **Doula study**
 - WHO and ACOG recommend continuous support. Some countries provide doula support for their families. We need a European doula study.

Thank you

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Doules

Synnytyksen ABC