



LJMU Research Online

Fleming, V, Meyer, Y, Frank, F, van Gogh, S, Schirinzi, L, Michoud, B and de labrusse, C

Giving birth: Expectations of first time mothers in Switzerland at the mid point of pregnancy

<http://researchonline.ljmu.ac.uk/id/eprint/9375/>

Article

Citation (please note it is advisable to refer to the publisher's version if you intend to cite from this work)

Fleming, V, Meyer, Y, Frank, F, van Gogh, S, Schirinzi, L, Michoud, B and de labrusse, C (2017) Giving birth: Expectations of first time mothers in Switzerland at the mid point of pregnancy. *Women and Birth*, 30 (6). pp. 443-449. ISSN 1871-5192

LJMU has developed **LJMU Research Online** for users to access the research output of the University more effectively. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LJMU Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain.

The version presented here may differ from the published version or from the version of the record. Please see the repository URL above for details on accessing the published version and note that access may require a subscription.

For more information please contact researchonline@ljmu.ac.uk

<http://researchonline.ljmu.ac.uk/>

1 **Abstract**

2 Problem and background: Despite a generally affluent society, the caesarean section
3 rate in Switzerland has climbed steadily in recent years from 22.9% in 1998 to 33.7%
4 in 2014. Speculation by the media has prompted political questions as to the
5 reasons. However, there is no clear evidence as to why the Swiss rate should be so
6 high especially in comparison with neighbouring countries.

7 Aim: To describe the emerging expectations of giving birth of healthy primigravid
8 women in the early second trimester of pregnancy in four Swiss cantons embracing
9 three languages.

10 Methods: Qualitative individual interviews with 58 healthy primigravid women were
11 audio recorded, transcribed and subjected to thematic analysis. Recruitment took
12 place through public and private hospitals, birth centres, obstetricians and
13 independent midwives. The main ethical issues were informed consent, autonomy,
14 confidentiality and anonymity.

15 Findings: The three main themes identified were being in limbo, experiencing a
16 continuum of emotions and planning the birth.

17 Discussion: Being pregnant was part of a project women had mapped out for their
18 lives. Only three women in our sample expressed a wish for a caesarean section. One
19 of the strongest emotions was that of fear but in contrast some participants
20 expressed faith that their bodies would cope with the experience.

21 Conclusion: Bringing together the three languages and cultures produced a truly
22 “Swiss” study showing contrasts between a matter of fact approach to pregnancy
23 and the concept of fear. Such a contrast is worthy of further and deeper exploration
24 by a multi- disciplinary research team.

25

26 **Keywords:** caesarean section, Switzerland, expectations, thematic analysis, decision
27 making in pregnancy.

28

29 **Statement of significance**

30 Problem: one third of births in Switzerland, a land of high living standards and with
31 good health care facilities, are by caesarean section.

32 What is already known: There are good antenatal and intrapartum services in
33 Switzerland but primarily provided by medical practitioners. Additionally, there are
34 low perinatal and maternal morbidity and mortality rates.
35 What this study adds: healthy primigravid women enjoy normal daily work and social
36 routines. They neither expect nor desire a caesarean section at the mid point of
37 pregnancy.

38 **Introduction and background**

39 In recent years, the caesarean section rate in Switzerland has climbed steadily from
40 22.9% in 1998 to 33.7% in 2014[1]. One third of all babies in Switzerland are
41 therefore born by caesarean section although no corresponding decline in perinatal
42 mortality has been noted. Caesarean section is now generating considerable interest
43 from the media which are questioning its necessity, its associated costs and its
44 longer term effects on women's and children's health in the country. Likewise,
45 political interventions on the topic are taking place both at national and regional
46 level. While such trends are not unique to Switzerland but parallel those in other
47 developed and developing countries, Switzerland's caesarean section rate has
48 climbed higher and faster than neighbouring countries and is now one of the highest
49 in Europe [2]. In contrast, countries such as Finland and the Netherlands have a 50%
50 lower caesarean section rate.

51 The systematic review carried out for the World Health Organisation (WHO)
52 suggested that there was no justification for caesarean section rates over 15% in
53 developed countries [3]. While the specialist literature generally agrees that the
54 increasing caesarean section rate is due to medical indications [4], the caesarean
55 section rate recommended by WHO to ensure optimal maternal and infant health
56 outcomes remains 10-15% [5,6]. In cases such as maternal fear of giving birth, other
57 forms of intervention may be possible to achieve the best outcomes.

58 The constantly increasing rate in the industrialised countries is a hotly debated topic
59 in both public and professional fora. Some see birth by caesarean section as a safe,
60 predictable and effective preventive alternative to unpredictable vaginal birth, while
61 others claim it as economically-driven, with unacceptably adverse effects on the
62 health of both mother and infant. Indeed, there is increasing evidence that the
63 negative health consequences of caesarean section without a clear medical
64 indication are underestimated, and that the increase is not associated with
65 improvements in perinatal mortality and morbidity [7,8]. Thus, a widespread theory
66 that the rise in caesarean sections could be attributed to an altered maternal risk
67 profile has not been confirmed [9]. In Switzerland large regional differences in
68 caesarean section rates particularly illustrate this point [10]. Comparable effective
69 alternatives to surgery, such as focused pelvic floor exercises to prevent

70 incontinence [11] or psychological interventions to relieve women's fears of birth are
71 often cited [12]. The findings of research into short-and long-term health
72 consequences of caesarean sections, such as postoperative pain and complications
73 in subsequent pregnancies often are not available to the women [9,13]. Healthy
74 newborns born at term also have a significantly increased risk of developing
75 respiratory distress syndrome [14], after a caesarean section. There is also some
76 work suggesting that Infants' gut microbiome development may be disturbed by
77 caesarean section because the babies do not come into contact with microbes of the
78 mother's vaginal tract. These may become further inhibited by antibiotic
79 prophylaxis given to the woman before the skin incision [15] . Compared with
80 vaginal birth, the composition of the intestinal microbiota of infants born by elective
81 caesarean section show persistence of low amounts of bifidobacteria and
82 bacteroides and over-representation of enterococcus and clostridium which has
83 been linked to diabetes mellitus and other childhood diseases such as asthma. [16] .
84 Thus, caesarean section as a safe alternative to vaginal birth is questionable [7,17].
85 This was confirmed in a multi country study carried out for WHO in which 24
86 countries and 373 health facilities, representative of the global picture, participated
87 [18] . A total of 286,565 births was analysed. 27.5% of births were caesarean
88 sections of which 1% had no stated medical indications. Compared with spontaneous
89 births, these showed increased risk of death, admission to intensive care units, blood
90 transfusion and hysterectomy. Gibbons et al [5], using a statistical modelling
91 scheme, also showed in a background paper for WHO how the much higher costs
92 associated with unnecessary caesarean sections contribute to the global burden of
93 health inequality. The authors' definition of "unnecessary" appears somewhat
94 unclear but appears to be where the best known estimate of expected numbers of
95 15% from previous WHO studies is exceeded. Using this approach, they concluded
96 that in 2009, Switzerland carried out 10,147 unnecessary caesarean sections at a
97 cost of US\$ 20,277,952.

98 Action plans are in place in some countries, including Switzerland, to reduce the high
99 rates of caesarean section and associated costs. The Swiss action plans, however,
100 remain somewhat vague with a lack of clarity as to why and when the decision is
101 made to undertake a caesarean section and which factors influence this process. This

102 raises the related questions of the expectations of pregnant women of their birth,
103 how the decision is made for the particular mode of giving birth and women's
104 experience of giving birth in relation to the decision making processes. Several
105 reviews on the topic have been published . Kingdon et al's systematic review of
106 nulliparous women's views of planned caesarean section in national surveys and one
107 randomised controlled trial found inconclusive results and methodological problems,
108 stating a need for good qualitative research as a foundation for future research [19] .
109 Likewise, McCourt et al, whose inclusion criteria were wider, concluded in their
110 critique of 17 studies concerning women's preferences or request for elective
111 caesarean section that rigour is almost always questionable and "well conducted
112 studies focusing on women's views were lacking" [20,p. 78]. Mazzone et al's
113 systematic review and meta-analysis of women's preferences for caesarean section
114 analysed 38 observational studies globally [21]. While more systematic than Kingdon
115 et al's review, this review was restricted to quantitative studies and the authors
116 highlighted the need for more and better research into the subject.

117 Other studies with a similar focus not included in the reviews were carried out in
118 Germany [13], Australia[22], Sweden[23] Norway [24]and the USA [9]. Most of them
119 offered cross sectional pictures of women's expectations using predetermined
120 questions. Fenwick et al [25] used a descriptive qualitative design to explore
121 Western Australian women's expectations of childbirth. These were represented by
122 five themes depicting both positive and negative views. However, their stated aim
123 of discovering women's reasoning for choosing a caesarean section was not really
124 addressed.

125 A further issue of particular relevance to the present study is the expectations that
126 women have of birth and how their own experiences influence this. No reviews but a
127 few studies were located in this field. A study undertaken in Switzerland[26]
128 questioned how 251 participants' views of their birth experiences changed in the
129 first two years of their child's life and sought to identify whether any particular
130 groups were at risk of negative birth experiences. Data were collected at 72 hours
131 post-partum and again in the second year after giving birth. The study is very useful
132 but the effect of the varying parity of the participants and the lack of focus on their
133 expectations leaves some unanswered questions as to the study's validity.

134 Despite reports in the popular media, the limited research findings show evidence
135 that very few women have the expectation of a caesarean section without any
136 obstetrical or psychological indication, preferring to focus on active participation in
137 labour and birth. While there is a growing body of research in this area reflecting the
138 importance of the topic, as yet there are limited well executed and reported studies
139 that examine the context in which the mode of birth is chosen. Few studies used a
140 longitudinal approach to explore the expectations of the mode of birth and the
141 influencing factors. Those cited above have used structured approaches which may
142 have limited the opportunity to explore how women's expectations might change
143 during the maternity experience. While the cited research reports have considerable
144 bearing on the present study, none of the results located are directly transferrable to
145 Switzerland although that of Wiklund et al [27] is relevant. In this, however,
146 participants were unable to voice their own opinions but had to match these to
147 questionnaires developed by health professionals. The present study aims to address
148 this deficit and create new knowledge in the field.

149 **Aim**

150 To describe the emerging expectations of giving birth of healthy primigravid women
151 in the early second trimester of pregnancy in four cantons (administrative areas) in
152 Switzerland.

153

154 **Methods**

155 *Setting*

156 Four cantons in Switzerland formed the setting for this study. Zürich and St Gallen
157 are German speaking cantons, Vaud French speaking and Ticino Italian speaking .

158 *Participants*

159 Participants were 58 healthy women pregnant for the first time recruited from the
160 above cantons. All have been allocated pseudonyms. One woman who initially
161 agreed to take part dropped out because of work pressures.

162 *Recruitment*

163 Recruitment took place through gatekeepers in public and private hospitals, birth
164 centres, obstetricians and independent midwives. Information about the study was
165 given in writing and verbally by one of the researchers and 48 hours later women

166 who had tentatively indicated an interest in participating were contacted by phone
167 to discuss the project and what their participation would involve. Those who agreed
168 to participate made an appointment to meet the researcher at a place and time of
169 their choosing. At the first meeting more questions were answered and a consent
170 form signed.

171 *Ethical considerations*

172 The main ethical issues were informed consent, autonomy, confidentiality and
173 anonymity. Primary permission to undertake to study was given by the Ethics
174 Commission for Zürich (KEK-ZH-2014-0367). Secondary permission was granted by
175 the ethics commissions of each of the other three cantons.

176 *Data collection*

177 Qualitative semi-structured interviews were chosen as the most appropriate method
178 for data collection. Interviews were open but a few key questions generated by the
179 whole team served as prompts. Data were collected at a place of each participant's
180 choice. Interviews lasted between 45 and 75 minutes. Interviews were audio-
181 recorded, transcribed verbatim using the programme F4.

182 *Data analysis*

183 Analysis was carried out in accordance with the method of Braun & Clarke [28].
184 Transcripts were entered into the MaxQDA software package from which codes
185 were initially generated from each interview by the researcher who had collected
186 the data. These codes were recorded in the language of the interview. Memos
187 pertaining to relevant codes and to every completed interview as a whole, as well as
188 significant codes were written in English and summarised the interview. The
189 interview memos then formed the first point of discussion amongst the team as to
190 commonalities and differences among participants. Out of this discussion themes
191 were generated in each canton. These were then compared by the senior
192 researchers on each site and combined themes allowed to emerge. As a final
193 member check these were discussed by the complete team and the quotes which
194 provided the best illustration determined.

195 *Trustworthiness*

196 Interviewers (authors 3-6) were experienced, female researchers based on two sites,
197 Lausanne and Zurich. Three were midwives, one a psychologist and one a sociologist.

198 Three had given birth. All were fluent speakers in the language in which they
199 collected the data and in English. All could read the three national languages. Prior
200 to commencing this project the researchers sat together and discussed their own
201 thoughts and ideas about giving birth to be aware of their own viewpoints and
202 potential biases. These thoughts were audio recorded or written down so that they
203 could be considered part of the data. At certain points during the study these
204 thoughts were revisited, checking to ensure that individual biases did not influence
205 the overall findings. All emergent codes were discussed in the teams on each site
206 and cantonal themes were compared between sites. The senior researchers in each
207 site also held monthly meetings ensuring consistency between the two sites, the
208 three languages, and the English translations of themes and quotes. Finally, the
209 whole team participated in agreeing final themes in accordance with the method.

210

211 **Findings**

212 Three major themes emerged and are discussed next. Where possible the
213 participants' own words have been used. An overall theme or category, such as
214 found in Grounded Theory studies, was not sought, but underpinning the three
215 themes was the notion that becoming pregnant and thus giving birth was part of a
216 lifelong project mapped out in advance. As Ronja stated:

217 It's simply a new, yes new, new thing, something that I have never
218 experienced before.

219 Likewise Verena noted that:

220 You need to have a stable basis in the relationship [with the baby], then
221 the birth can be built up like lego blocks.

222 *Being in limbo: taking or avoiding decisions*

223 At approximately this midway point in their pregnancies, participants all
224 acknowledged the magnitude of the change their pregnancies could bring about but
225 had differing responses. Claudia for example felt that:

226 At the beginning it wasn't the best because of the nausea, and then once
227 you're past that it's putting on, piling on weight, I only could work half
228 time because of that. Then eventually around the 19th week it slowly
229 stopped. And now we're a bit better, I'm enjoying life again. I can do

230 more but I'm still really tired as well as working and there isn't room for
231 much more. So my focus is really the nausea and not so much on looking
232 forward to the baby and what's to come.

233 Claudia's views were supported by Nadine who stated:

234 ...at the beginning I wasn't looking forward to it at all. There's other
235 mothers who tell me that it wasn't any better for them in pregnancy. So
236 for me it was a bit like 'I must get through it'. So I really don't enjoy my
237 pregnancy even though I don't have the same complaints now.

238 However, the decision to start a family was seen by others as:

239 I'm a bit pragmatic because I think you just take it a month or even a
240 week at a time, it'll be ok or if not you need to rethink (Katja).

241 Scarlet noted that, as a self-preservation measure, she did not want to think too
242 much about being pregnant at the beginning of the pregnancy. But now in her
243 second trimester she started to acknowledge her pregnancy, and allowed herself to
244 think about the baby.

245 During the first three months, I really...I forced myself not to build up any
246 emotional relationship with this "egg". I called him "egg" at the
247 beginning because I was really scared of having a miscarriage.

248 Hearing predominantly negative feedback about childbirth from friends and
249 relatives, some women perceived themselves as outsiders when thinking that birth
250 might be a positive experience. Feeling confident that the process may be not be as
251 difficult, painful and risky as predicted, Violette preferred not to speak about her
252 vision to avoid justifying herself or feeling marginalised.

253 Yes, I do not talk so much about it apart from with my family and my
254 close friends. This is something I do not speak about because I feel like...
255 yes a bit different.

256 The magnitude of change also affected participants' views as to where and how they
257 would give birth, all being aware that these were elements to consider. Most
258 participants aimed for a vaginal birth, but two suggested that elective caesarean
259 section was the best choice in relation to their life needs and their views of their
260 medical needs, Mia articulating it:

261 To deal with this, it is better to choose a date, and thereafter we can
262 organise meetings or work. Then I know that this week and then the two
263 or three weeks after I am booked... well not really booked...but having a
264 pause and then it is the best way to organise my diary.

265 Perceived maternal or infant risks in relation to place of birth were felt strongly by
266 the participants, those who chose alternatives to hospitals feeling compelled to
267 justify their choices to disparaging friends and family members. Such discussions
268 were sources of stress, as the women who elected to give birth at home or in a birth
269 centre often heard negative comments about these settings. They were said to be
270 irresponsible and to take great risks to their own and their babies' health. Some
271 participants felt the need to discourage such negative discourses that intensified
272 their fears or to question their decisions.

273 The gynaecologist told me that I would die in a birth centre. She told me,
274 'you'll have a haemorrhage and then you have to act fast and at the
275 hospital there's a neonatologist'. She said a lot of things which have also
276 frightened me although I tried to laugh about it because I knew she was
277 just stupid, trying to justify her job in the sense that she wants me to give
278 birth in her hospital because she makes money out of it. Anyway it's her
279 job and she believes in her job but still she managed to scare me [Lana]

280 *Continuum of emotions: ideals/fears/faith*

281 Although few of the women had unplanned pregnancies and the notion of them
282 being a project was to the fore, it did not mean that they were immune from
283 emotions when considering their births. For some participants, the main emotion
284 was fear:

285 I think it's simply that I didn't have any trust. Until now nothing has
286 come easily so the fear of... 'why should it work first time'. Since then
287 you hear all these stories from round about...like someone lost it [the
288 baby] in the seventh week and someone in the 12th. However I'm not
289 usually a timorous person. (Barbara)

290 While Barbara's fears appeared related to every aspect of her pregnancy, Rojna's
291 fears focused on the birth itself:

292 Fear of the birth is already there, well fear of the pain. Or maybe we'll do
293 this but not this or this.... uncertainty maybe about when this little baby
294 is here. Because now it's easy, I carry it around with me. And birth is
295 another situation when you really have absolutely no idea what's
296 happening then, And after the birth all is changed. I just can't put words
297 to it.

298 Rojna fears related primarily to uncertainties and these was also addressed by Freya
299 who felt a lack of control and worried about how to be proactive.

300 Yes, so I worry about when I have to go into the hospital. Because my
301 partner might not be here if he's abroad. Oh well...that's the way it
302 goes. But I do worry about what my role is, how I should prepare myself
303 or is it all right. I don't do any preparation now, will I have enough
304 support from the people there? Or what will really happen in the birth;
305 how will it go, how will I know it's begun? There is nothing to make me
306 totally certain, I have absolutely no idea. On the other hand I say it can't
307 be too big a deal because billions of women have done it, but like I say, I
308 want as much tuition as possible.

309 The fear of having to cope with such a frightening experience made participants
310 think about possible approaches to birth with which they think they will be able to
311 cope.

312 Well, I understand the desire to find a balance and have a birth that's as
313 serene as possible even though in my opinion anyway it's war, especially
314 the first time when you don't know what to expect. So whatever you
315 may imagine, read or have been told it will be 10,000 times worse or
316 different or better than anything one can imagine or read but anyway I
317 think it will be WAR. [Julia]

318 Such negative representations might also impact on how participants envisaged
319 birth. When they felt that their physical integrity was threatened by the baby passing
320 through, or that their fear of childbirth is so intense, caesarean section was initially
321 contemplated as a simpler alternative.

322 There are some women who feel less torn after a caesarean section in
323 comparison with a vaginal delivery...There are some women who
324 experienced issues and have flash backs. [Mia]

325 People are scared to suffer... we hear sometimes women who say 'well,
326 me, I certainly do not want to give birth ... I would like to be put to sleep
327 completely and waken up when the baby is there' or things in the same
328 line, and I tell myself, well it's not like that that life functions. [Audrey]

329 Other representations of childbirth were more balanced, and relied on faith that
330 childbirth was a natural process traditionally achieved by giving birth vaginally. Some
331 women considered childbirth as a natural process which can be successfully
332 achieved. These women tended to feel confident in their own capacity to give birth
333 and cope with pain. Lucie reflects this:

334 From my point of view we are made for this, women, therefore, I do not
335 see why there could be a problem or anything else. So it's true, I am
336 quite laid-back about that.

337 Finally, some participants visualised that natural birth was the outcome of personal
338 preparation. Those women felt responsible for the outcome of childbirth and thus
339 envisaged caesarean section as a personal failure.

340 If I can avoid a caesarean section, it would be really, really nice because I
341 will be really disappointed if I go for a caesarean section; really
342 absolutely, absolutely disappointed. I will take it personally like I would
343 have badly managed, like I would have done something wrong even if it
344 is not the case. I try to convince myself before childbirth but.... For me I
345 think it would difficult... psychologically, to accept. [Violette]

346 Some women who considered vaginal birth as in the natural order of things and
347 those who felt a personal responsibility to achieve natural birth planned to give birth
348 outside of a hospital. All referred to hospital in negative terms, revealing
349 representations suffused with fear of being submitted to protocols.

350 I feel like in the hospital, lots of things are done which are not necessary,
351 in order to reassure healthcare providers and so they do not miss
352 anything or so we cannot reproach them for anything. But I say there are

353 lots of things that happen in hospital that are not necessary... yes...and I
354 do not want to suffer from that [Florence]

355 Women felt the need to know as much as possible about pregnancy and childbirth. It
356 could be seen as a means of understanding their body changes and reducing the
357 fears of forthcoming childbirth.

358 I like to be informed if I can. It calms me down. I have more control of the
359 situation if I already know things. Then, I can know the details as time
360 passes but I have more or less an idea of how things will progress. This
361 makes me feel calmer. I'm not wondering now how badly I'm going to
362 do. I say to myself that I know these possibilities now and afterwards
363 we'll see. [Mina]

364 Several participants were active in seeking information. They used different sources
365 e.g: books, TV, films, conferences or meetings of groups promoting physiological
366 childbirth. Some of them accessed multiple sources of information to obtain a
367 satisfactory answer.

368 I, like a big girl, looked a bit for information elsewhere and then... to
369 determine what the risk factors of tearing etc were...and then what
370 to do, so I am curious about that. Let's say I do not stop after one
371 version, even from my mum. After that I'll make my mind up on the
372 topic. [Juliette]

373 In some cases, seeking information led women to change their vision of childbirth
374 and to consider a different birth plan. It was especially true for those who got in
375 touch with groups promoting physiological birth.

376 I have attended lots of conferences from the association. They had lots of
377 events recently, I got informed, on well...well what the choices are.

378 Because at the end, it's a world we discover, actually I did not know my
379 options in relation to childbirth [Sacha]

380 Most of the women did not initially consider giving birth in a birth centre, midwife
381 led unit, or at home. Some participants were unsure about the services provided
382 there or considered that the nature of the service provided did not fit their clinical
383 situation or needs. (e.g: lack of epidural, remote from the hospital, specialist
384 service).

385 The birth centre. I don't know... I have heard about that but I do not
386 know really what it is... so for me, hospital is the traditional thing, but I
387 have enough confidence in the traditional system, so I would say no. For
388 me a private hospital is something more exclusive which costs a bit more,
389 and is for the higher social class. I associate them with plastic surgery or
390 rehabilitation. [Scarlet]

391 *Planning the birth*

392 Many participants, as part of their projects, had given careful consideration as to
393 how they would deal with labour and birth. Primiparous women, however, often
394 considered that the healthcare providers are the birth specialists so they relied on
395 them in the early antenatal period. Some women used them to validate or reject
396 their choice of mode of childbirth or to pursue options and make choices.

397 Regarding birth I've never really asked myself what it would be like.

398 Instead, with my midwife I have really built this idea. Perhaps right from
399 the start I built a new idea. She didn't really make me change my mind
400 because before I didn't really have a true idea, but let's say that I
401 developed it with her help. [Lana]

402 Other women seemed to look for advice from health care professionals before
403 making their own decisions regarding mode or place of birth. They expected to find
404 an opportunity to discuss or discover complementary aspects of important decisions.

405 I think that now I am influenced a bit by the people I met in the
406 association and now I have to have the same discussion with the
407 obstetrician on the same subject and get another point of view, get
408 something different. [Sacha]

409 However, regarding making decisions during labour and specifically if something
410 went wrong, women relied on their health care provider to make the final decision
411 about mode of birth.

412 [I must] have somebody in whom I have confidence, I can rely on, and
413 then it is this person who tells me.... Well, I have enough confidence to
414 tell myself that if she thinks that this or that has to be done, then I will
415 follow her. [Florence]

416 Several participants showed profound confidence in the hospital system or in their
417 obstetricians; one preferring to let him choose her mode of birth. For another
418 woman, it was the opposite, she insisted that there could not be a stronger influence
419 than herself, and it was your personal thoughts, supplemented with information that
420 would help her to make her choice.

421 I think... it is not a question of.... I want to get rid of the decision making. I
422 think that the decisions belong first of all to the health care providers, to
423 the doctors, not the patients [Nora].

424 It has to do with your own responsibility to get informed... well an adult
425 who is pregnant, it has to do a little with the person's responsibility to
426 get informed and even more to have the will to get informed, but after
427 all everybody is different [Scarlet]

428 Tajna appeared to have some clear paths in her mind while acknowledging that
429 nothing could be entirely certain:

430 So before labour, I need to know what happens, like that is A and B that I
431 need to do. And of course I want it all to go smoothly without
432 complications, that it just goes perfectly and I hope that until the due
433 date there's not too many problems so that I can get myself orientated.
434 Then I know it depends on each case and if everything doesn't go
435 smoothly there's the chance of an epidural.

436 A few participants described their ideal images of childbirth during the interview.
437 Childbirth can be seen as a moment when mother and baby help each other or a
438 difficult moment but one which strengthen the women in her future life. In each of
439 these cases, the guarantee of the ideal vision of childbirth is only possible if the birth
440 happens a birth centre or at home, where the women feel like they really listened to.

441 I'd like to see my childbirth a little *ROMANTICALLY*. That is, to think that
442 it really is a journey my baby and I do together and that we help each
443 other [Lana]

444 You read or you hear about these women who somehow after an hour or
445 even less have given birth. That would be great, a complication free
446 normal birth. Yes and not a long and unending painful labour leading to
447 complications. That would be good. I'm also against a caesarean but

448 wouldn't say no if it was necessary on medical grounds. Also I really
449 hope simply for a lot of support from the medical staff. [Freya]

450 Many women expressed their needs for continuity of care provider. Having a known
451 carer was linked to a feeling of security especially in such an unfamiliar experience as
452 the first childbirth.

453 I expect somebody to follow me from A to Z. [Léanne]

454 Being known by their care provider throughout pregnancy and childbirth was also
455 perceived as a guarantee that their desires would be respected.

456 The principles of safety and confidence are very important. And then it is
457 the advantage of the birth centre, in the fact that we have somebody
458 whom we have met who supports us, and knows our way of thinking.

459 [Juliette]

460 Some participants argued their wish for continuity of care provider in relation to
461 institutional organisation of care. Based on testimonies or on their knowledge of the
462 system, they anticipated potential difficulties in securing continuity with their lead
463 provider and looked for the best way to answer them.

464 The hospital system, I think I would be stressed with...all the comings and
465 goings that might exist around me, I heard...Furthermore, lots of people
466 told me that often during and after childbirth... there are lots of people
467 who come round, we do not have necessarily one person who looks after
468 you. Then, we can have lots of different advice and this... yes I would be
469 anxious and unsettled because of all the different advice [Lucie]

470 For women, it was particularly important to give birth where their HCP in the
471 institution where their HCP was working.

472 I didn't choose the hospital but simply my obstetrician works at this
473 facility and therefore I've known for the past five or six years that I would
474 have given birth there if I didn't change my physician. I already liked the
475 idea anyway so the choice has somewhat been influenced by the
476 obstetrician. [Nina]

477

478 Discussion

479 In the previous section some carefully selected quotes have been presented to allow
480 key responses of the participants to be presented in their own words. Hence, this
481 section simply highlights and develops a few of the major points in relation to other
482 published literature.

483 While all of the participants acknowledged there had been a huge change in their
484 lives, their responses showed no unanimity, some being too busy with other issues
485 to deal with it and others immediately deciding upon their place and mode of birth.
486 The metaphors expressed by women such as likening pregnancy and birth to building
487 with lego blocks suggest that being pregnant was simply part of a project they had
488 mapped out for their lives. This tied in with the responses of several participants
489 who appeared to have given the subject little thought but when asked about how
490 they would like to give birth all responded that they aimed for a vaginal birth.
491 However, for some, it appeared to be a question reflected back to the researcher as
492 if to say “what else would we do?” Only three women in our sample expressed a
493 wish for a caesarean section at the midway point of the pregnancy thereby
494 supporting previous findings [20, 21] but contradicting the current popular belief
495 that many women wish to have a caesarean section.

496 One of the strongest emotions expressed by participants was that of fear. As shown
497 in the preceding section for one participant the fear was so great she refused to
498 allow herself to build up a relationship with her developing baby to the extent of
499 calling it an “egg”. This is contradictory to the trend experienced in recent years
500 whereby health professionals have sought to use language which is considered in
501 keeping with the language that health service consumers might use. A key example
502 of this is the tendency to use the word “baby” rather than “fetus” throughout
503 pregnancy, not simply in discussion with women but in clinical records. Less
504 uncommon is the fear of pain or loss of control during labour which appeared to be a
505 major concern for many participants. While this has been described in recent
506 studies, [29, 20] the depth of emotions reported by some of the participants showed
507 extreme imagery such as “war” or “being put to sleep” suggested that such fears are
508 deeply embedded and may be a previously unarticulated phenomenon. It also
509 suggested that for some women the total passivity experienced in birth 70 years ago

510 when they were actually anaesthetised and the cervix manually dilated may have
511 been welcomed here. [31]

512 In contrast to fear some participants expressed faith that their bodies would cope
513 with the experience but that they could not simply stand back and let this happen.
514 This contrast is also expressed in other studies [32, 33] Here, participants were
515 proactively considering various options but at the same time, still having fears that
516 alternatives to state run hospitals were perhaps lacking in essentials. For a country
517 that has a comprehensive midwifery service, funded by all major insurance
518 companies, this is a somewhat surprising finding. It, however, ties in with the feeling
519 expressed by most participants that when they became pregnant the obvious thing
520 to do was to go to their obstetricians, thus receiving most of their information from
521 them. In Switzerland, regardless of insurance packages, every woman has the right
522 to have a gynaecologist and many do so and from when they are teenagers. Thus, in
523 the present study some participants had built up relationships with their
524 gynaecologists over a period of years, so turning to them for obstetric services.
525 While research literature has shown the unique relationship midwives have with
526 women by continuity of midwifery care over a long period of time, in the present
527 study what continuity was sought varied amongst participants.

528 Conclusions, limitations and recommendations

529 The results have generally supported other research findings but they have also
530 generated new knowledge which is relevant and worthy of further exploration. In
531 particular the notion of pregnancy as a project underpinned by strong emotions
532 appears to be a new development. The feeling of limbo is also new as participants
533 were healthy and other “projects” such as work ,sport or other social activities were
534 still being given higher priority at this point of the pregnancy.

535 It is the first such study to be carried out in Switzerland. While a relatively small
536 country, it represents a microcosm certainly of mainland Europe and possibly of
537 other areas in that it contains three major language regions, from four cantons, each
538 with its own culture and customs. In bringing together the data the plan was not to
539 compare and contrast the regions but to consider the “Swiss” experience and the
540 results of the analysis have focused on the commonalities. Nonetheless, it could also
541 be of value to consider the similarities and differences between the different regions

542 of the country so that institutions such as insurers which cover the whole country
543 can ensure they cover the most appropriate services.

544 The sample in this study was “healthy primigravid women”. Regardless of this, an
545 unexpected finding was the matter of fact approach to pregnancy articulated by
546 many of the participants. Given the time and energy invested in antenatal care and
547 more particularly the different childbirth education and parentcraft classes on offer,
548 these are something that health care providers might like to reconsider. Likewise,
549 midwives, wishing to provide the complete range of services throughout the
550 pregnancy continuum, need to give much higher consideration as to how their
551 services can become more visible, mainstream and acceptable.

552 The concept of fear was a major issue. While it is neither unrealistic nor unhealthy to
553 express a fear of the unknown, the emphasis placed on this was much higher than
554 expected and also presented a conundrum when considered alongside the matter of
555 fact approach that the same women appeared to express. Such a contrast is worthy
556 of further and deeper exploration by a multi- disciplinary research team.

557 This study provides the basis for further data collection and longitudinal comparison
558 at later points in the pregnancy and post natal period. Such work is ongoing. While
559 the sampling strategy was intended to be as appropriate as possible, and a vast
560 amount of data was generated, qualitative research can never be truly
561 representative of the population as a whole. Therefore it is planned that the results
562 of this study together with those from the later time periods be used to generate a
563 questionnaire for testing in a larger sample of women giving birth in Switzerland.

564

565 References

- 566 1 Bundesamt für Statistik. *Caesarean section statistics*. 2016 Email from S. Berrut to
567 research team
- 568 2 Euro Peristat. *European Perinatal Health Report 2010*. Available:
569 <http://www.euoperistat.com/reports/european-perinatal-health-report-2010.html>
570 accessed 13 December 2016.
- 571 3 Betran A, Torloni M, Zhang J, Ye J, Mikolajczyk R, Deneux-Tharaux C et al. What is
572 the optimal rate of caesarean section at population level? A systematic review of
573 ecologic studies. *Reproductive Health*, 2015,12(1),57.
- 574 4 Menacker F, Declercq E, Macdorman M. Cesarean delivery: background, trends,
575 and epidemiology. *Seminars in Perinatology*, 2006, 30 (5), 235-241.
- 576 5 Gibbons L, Belizán J, Lauer J, Betrán A, Merialdi M, Fernando A. The global
577 numbers and costs of additionally needed and unnecessary caesarean sections
578 performed per year: overuse as a barrier to universal coverage. Geneva: *World*
579 *Health Report 2010* Background Paper, 30.
- 580 6 Ye J, Betran A, Vela M, Souza J, Zhang J. Searching for the Optimal Rate of
581 Medically Necessary Cesarean Delivery. *Birth*, 2014, 41(3):237-43.
- 582 7 Wax J, Cartin A, Pinette M, Balckstone J. Patient choice cesarean: an evidence-
583 based review. *Obstetrical & Gynecological Survey*, 2004, 59 (8), 601-616.
- 584 8 Ye J, Zhang J, Mikolajczyk R, Torloni M, Gulmezoglu A, Betran A. Association
585 between caesarean section rates and maternal and neonatal mortality in the 21st
586 century. *BJOG: An International Journal of Obstetrics & Gynaecology*, 2016,
587 123(5),745-53.
- 588 9 Declercq E, Menacker F, Macdorman . Maternal risk profiles and the primary
589 cesarean rate in the United States, 1991-2002. *American Journal of Public Health*,
590 2006,96 (5), 867-872.
- 591 10 Bundesamt für Gesundheit *Kaiserschnittgeburten in der Schweiz*, 2013 Available:
592 <http://www.bag.admin.ch/themen/medizin/13641/index.html> Accessed 13
593 December 2016.
- 594 11 Hosli I. Influence of pregnancy and delivery to the pelvic floor. *Therapeutische*
595 *Umschau*, 2010, 67 (1), 11-18.

- 596 12 Hildingsson I, Nilsson C, Karlström A, Lundgren I. A longitudinal survey of
597 childbirth-related fear and associated factors. *JOGNN - Journal of Obstetric,*
598 *Gynecologic, & Neonatal Nursing*, 2011, 40 (5), 532-543.
- 599 13 Lutz U, Kolip P. Die GEK-Kaiserschnittstudie. *Schriftenreihe zur*
600 *Gesundheitssystemanalyse*, 2006, Band 42. St. Augustin: Asgard-Verlag.
- 601 14 Luca R, Boulvain M, Irion O, Berner M, Pfister R .. Incidence of Early Neonatal
602 Mortality and Morbidity After Late-Preterm and Term Cesarean Delivery. *Pediatrics*,
603 2009, 123, 1064-1071.
- 604 15 Costantine M, Rahman M, Ggulmiyah L, Byers B, Longo M, Wen T, Hankins G,
605 Saade G. Timing of perioperative antibiotics for caesarean delivery. *AJOG*, 2008,
606 199(3):301.e1-301.e6
- 607 16 Penders J, Thijs C, Vink C, Stelma F, Snijders, Kummeling I, van den Brandt P,
608 Stobberingh E. Factors influencing the composition of the intestinal microbiota in
609 early infancy. *Pediatrics*, 2006, 118(2):511-521
- 610 .
- 611 17 MacDorman M, Menacker F, Declerq E. Cesarean birth in the United States:
612 epidemiology, trends, and outcomes. *Clinics in Perinatology*, 2008, 35 (2), 293-307.
- 613 18 Vogel J, Betrán A, Vindevoghel N, Souza J, Torloni M, Zhang J et al. on behalf of
614 the WHO Multi-Country Survey on Maternal and Newborn Health Research Network.
615 Use of the Robson classification to assess caesarean section trends in 21 countries: a
616 secondary analysis of two WHO multicountry surveys. *Lancet Global Health*, 2015,
617 3(5):e260-70.
- 618 19 Kingdon C, Baker L, Lavender T. Systematic review of nulliparous women's views
619 of planned cesarean birth: the missing component in the debate about a term
620 cephalic trial. *Birth*, 2006 33(3), 229-237.
- 621 20 McCourt C, Weaver J, Statham H, Beake S, Gamble J, Creedy D. Elective Cesarean
622 Section and Decision Making: A Critical Review of the Literature. *Birth*, 2007, 34 (1),
623 65-79.
- 624 21 Mazzoni A, Althabe F, Liu N, Bonotti A, Gibbons L, Sánchez A, Belizán J. Women's
625 preference for caesarean section: a systematic review and meta-analysis of

- 626 observational studies. *BJOG: An International Journal of Obstetrics & Gynaecology*,
627 2010, 118 (4), 391-399.
- 628 22 Gamble J, Creedy D. Women's preference for a cesarean section: incidence and
629 associated factors. *Birth*, 2001, 28 (2), 101-110.
- 630 23 Waldenström U, Hildingsson I, Ryding E. Antenatal fear of childbirth and its
631 association with subsequent caesarean section and experience of childbirth. *BJOG:
632 An International Journal of Obstetrics & Gynaecology*, 2006, 113 (6), 638-646.
- 633 24 Kringeland T, Daltveit A, Måller A. What characterizes women in Norway who
634 wish to have a caesarean section? *Scandinavian Journal of Public Health*, 37 (4), 364-
635 371.
- 636 25 Fenwick J, Hauck Y, Downie J, Butt J. The childbirth expectations of a self-selected
637 cohort of Western Australian women. *Midwifery*, 2005, 21 (1), 23-35.
- 638 26 Stadlmayr W, Amsler F, Lemola S, Stein S, Alt M, Bürgin D, Surbek D, Bitzer J.
639 Memory of childbirth in the second year: The long-term effect of a negative birth
640 experience and its modulation by the perceived intranatal relationship with
641 caregivers. *Journal of Psychosomatic Obstetrics & Gynecology*, 2006, 27 (4), 211-224.
- 642 27 Wiklund I, Edman G, Andolf E. Caesarean section on maternal request: reasons
643 for the request, self estimated health, expectations, experience of birth and signs of
644 depression among first time mothers. *Acta Obstetrica and Gynecologica*, 2007, 86 (4)
645 451-456.
- 646 28 Braun V, Clarke V. Using thematic analysis in psychology, *Qualitative Research in
647 Psychology*, 2006;3:2, 77-101.
- 648 29 Veringa I, de Bruin E, Bardacke N, Duncan L, van Steensel F, Dirksen C, Bogels S.
649 'I've Changed My Mind', Mindfulness-Based Childbirth and Parenting (MBCP) for
650 pregnant women with a high level of fear of childbirth and their partners: study
651 protocol of the quasi-experimental controlled trial. *BMC Psychiatry*, 2016, 16(1),377.
- 652 30 Shaw D, Guise J, Shah N, Gemzell-Danielsson K, Joseph K, Levy B, Wong F, Wood
653 S, Main E. Drivers of maternity care in high-income countries: can health systems
654 support woman-centred care? *Lancet*, 2016, 388(10057), 2282-2295.
- 655 31 Koster H, Perrotta I Elective painless rapid childbirth anticipating labour. *Excerpts
656 Medical Surgical*, 1943,1 143-147.

657 32 Ryding E, Lukasse M, Parys A-S van, Wangel A-M ,Karro H, Kristjansdottir H,
658 Schroll A-M, Schei B. Fear of Childbirth and Risk of Cesarean Delivery: A Cohort Study
659 in Six European Countries *Birth*, 2015, 42. 1523-536X

660 33 Christiaens W, Bracke P. Place of birth and satisfaction with childbirth in Belgium.
661 *Midwifery* 2009 Apr;25(2):e11-9.

662

663