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ORIGINAL ARTICLE

NEW INSIGHTS INTO MATERNITY CARE DESIGN AND DELIVERY

Findings from the Italian Babies Born Better Survey

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ABSTRACT

BACKGROUND: The most recent WHO recommendations "Intrapartum care for a positive childbirth experience" highlight the need to identify women-centered interventions and outcomes for intrapartum care, and to include service users' experiences and qualitative research into the assessment of maternity care. Babies Born Better (B3) is a trans-European survey designed to capture service user views and experiences of maternity care provision. Italian service users contributed to the survey.

METHODS: The B3 Survey is an anonymous, mixed-method online survey, translated into 22 languages. We separated out the Italian responses and analyzed them using computer-assisted qualitative software (MAXQDA) and SPSS and STATA for quantitative data analysis. Simple descriptives were used for the numeric data, and content analysis for the qualitative responses. Geomapping was based on the coded qualitative data and postcodes (using Tableau Public).

RESULTS: There were 1000 respondents from every region of Italy, using a range of places of birth (hospital, birth center, home) and experiencing care with both midwives and obstetricians. Most identified positive experiences of care, as well as some practices they would like to change. Both positive and critical comments included provision of care based on the type of providers, clinical procedures, the birth environment, and breastfeeding support. There were clear differences in the geomapped data across Italian regions.

CONCLUSIONS: Mothers highly value respectful, skilled and loving care that gives them a strong sense of personal achievement and confidence, and birth environments that support this. There was distinct variation in the percentage of positive comments made across Italian regions.

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KEY WORDS: Midwifery - Qualitative research - Italy - Delivery, obstetric - Breast feeding.

The most recent WHO recommendations "Intrapartum care for a positive childbirth experience" highlight the need to identify women-centered interventions and outcomes for intrapartum care.[1] They suggest that "*adopting a woman-centered philosophy and a human rights-based approach opens the door to many of the care options*" and recommend that service us-

ers' experiences and qualitative research should be used to optimize the future development of maternity care, facilitating participatory research and engagement with women's groups. These recommendations are linked to wider movements to place women at the center of birth and to challenge excessively technocratic approaches to care. This is a position endorsed by WHO since the 1985 Fortaleza Declaration.[2] In 2014 the WHO promoted this agenda further when they published the statement "The prevention and elimination of disrespect and abuse during facility-based childbirth," which called for all states to acknowledge women's experiences of birth and to produce qualitative data that could guide national policies for respectful, competent and caring maternity assistance.[3]

In the UK and the USA, research involving service users' experiences and qualitative data, as well as data from healthcare providers, have been influential in improving maternity care policies. This led to UK initiatives such as "Changing Childbirth" in 1993[4] and the more recent NHS England Better Births Maternity Transformation Programme.[5] In the USA, the service users' "Listening to mothers" Survey has been run regularly since 2002.[6, 7]

In Italy surveys of maternity care have been carried out by governmental bodies, focusing mainly on evaluation of operational models of maternity care rather than on women's personal experiences,[8] with the exception of a recent innovative survey of women's experience of "obstetric violence."[9, 10] Official data show that, in 2015, 34.4% of women gave birth by caesarean,[11] with rates of 52.5% in private facilities financed by the national health system. The official report (CeDAP) reveals a national tendency to inappropriate care, indicated primarily by high caesarean rates. However, no data are collected about the consequences of this care or about the evaluation of this care by women (or providers).

In light of this, the international Babies Born Better (B3) Survey (www.babiesbornbetter.org) provides a unique insight into maternal views and experiences of Italian maternity care. The B3 is an anonymous, mixed-method online survey developed by a group of 27 country coordinating groups linked to the EU funded COST Action IS1405 (www.eubirthresearch.eu). It was designed to explore women's birth experiences across Europe and to identify factors that could support the delivery of optimal maternity care and positive birth experiences for women. It is intended that this knowledge is used to improve the quality of maternity care across Europe. It is focused on women identifying the issues that are most significant to them, thus foregrounding their voices and their experiences.

This paper reports on the findings of B3 Survey for women who birthed in Italy between 2010 and 2015. Using both quantitative and qualitative data the paper explores the aspects of care that women value most in maternity care. It identifies locations where women are most positive about their care and highlights areas where they would like to see changes. These findings, and consequent recommendations, are placed in the context of maternity care in Italy.

Materials and methods

The survey was translated into 22 languages and was online between February 2014 and November 2015. In this period 37,732 women from 66 countries responded. The questionnaire comprises 19 questions, with sub-questions, divided into six sections. It was designed to be short and simple to use and to be applicable in a range of cultural and linguistic settings to facilitate maximum participation. It includes quantitative questions related to demographics, clinical factors and type of care/place of birth and open response questions which invited women to express their views on both positive aspects of their maternity care experience and to suggest changes they would like to see. Participants were also asked to provide an honest description of the care they had received. A full description of the methodological challenges, design, conduct and analysis of the first round is available in Downe *et al.* (under review). Thus far data from this survey have been analyzed for four countries (Austria, Germany, Croatia, and Portugal), and the results have been reported elsewhere.[12-15] The Italian translation of the first iteration of B3 Survey was launched in June 2014 and closed in November 2015. This is the time period covered by the results presented in this paper.

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Statistical analysis

The data were analyzed using qualitative and quantitative data analysis tools (MAXQDA, STATA, SPSS). Manual data assessment and thematic analysis were discussed among authors who are researchers, healthcare providers and service users' representatives. Since the questionnaire was multilingual each respondent who gave birth in Italy could answer in any available language. The authors translated these responses.

Demographics were analyzed for the mean and standard deviation and median and quartiles (age) or percentage (parity, history of pregnancy problems, type of health care provider, and birthplace). Quantitative variables (place of birth, type of providers, pregnancy issues etc.) were also cross-analyzed with qualitative coded segments. Variables were analyzed by means of parametric or non-parametric tests when appropriate, characteristics are shown in Table I. For quantitative analysis see Table II, III. A P value <0.05 was considered statistically significant.

Content analysis of the free-text comments (questions 14-17, Table IV) was done using MAXQDA software. This approach has been described as "*a research method for subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns.*"[16] The analysis process involves selecting the unit of analysis, categorizing and finding themes from categories.[17] The data for all four questions were analyzed together. Expressions with higher frequency within the data set were first selected using the 'word count' feature, then we pinpointed emerging themes and coded the text segments. This analysis produced a number of categories and themes on which our hypotheses and recommendations are based.

In order to geographically represent the data

TABLE I.—*General sample characteristics.*

	Mean (SD)	Median (quartiles)	Missing values
Age (years)	33.60 (4.79)	34 [30;37]	0
Gestational age (weeks)	39.49 (1.88)	40 [39;41]	0
Number of births	1.45 (0.65)	1 [1;2]	0
Age at birth	32.52 (4.67)	32 [30;36]	14

TABLE II.—*Distribution of quantitative variables in the sample.*

	% (N.)	Missing values
Age at birth		38
<20	0.42% (4)	
20-29	24.43% (245)	
30-39	69.02% (664)	
≥40	6.13% (59)	
Pregnancy issues	19.50% (187)	17
Care staff		153
Midwives	67.68% (557)	
Doctors	6.93% (57)	
Nurses	1.46% (12)	
Midwives + Doctors + Nurses	21.51% (177)	
Other	2.43% (20)	
Place of birth		153
Hospital	85.30% (702)	
Birthing center (in hospital)	1.58% (13)	
Birthing center (outside hospital)	0.97% (8)	
Homebirth	8.51% (70)	
Other	3.65% (30)	

TABLE III.—*Attending personnel in case of pregnancy issues.*

	Pregnancy issues	
	Yes	No
Care staff		
Midwives	49.12% (84)	72.55% (473)
Doctors	12.87% (22)	5.37% (35)
Doctors + midwives	32.75% (56)	18.56% (121)
Other	5.26% (9)	3.53% (23)
Total	100% (171)	100% (652)

χ^2=35.7, P<0.001.

TABLE IV.—*B3 Survey open-ended questions 14-17.*

Q14	What were the three best things about the care you got? Please put the very best thing at the top of the list.
Q15	If you had the power to make three changes in the care you had, what would the changes be? Please put the most important change at the top of the list.
Q16	Imagine a very close friend or family member is pregnant. They have asked you to give them an honest description of the care you got at the place where you had your last baby. You can only use up to six words or phrases. What would those words or phrases be?
Q17	Please write any comments you want to make here. These could explain your answers in more detail, or add any other information you would like us to know about your experiences with maternity care.

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outcomes (Figure 1), the qualitative data set was divided into 10 variables by manual coding, where the free text of each respondent was assigned to a specific variable (1-10, from most positive to most negative; Table V). The following criteria were used to define the variables: number of positive and negative comments and suggestions; expressions of emotions emerging through the analysis of both the content and the form of the texts; declared presence or lack of humanity; influence of clinical practices on the psychophysical outcomes, as expressed by the respondents. The median score of comments within each region of Italy was then geomapped to that region by using place of birth location data (town name/postcode) provided by the respondents (we used Tableau Public 8.4 for this purpose). To provide a quick impression of the geomapped data, we used colors in which the deeper green the region, the higher the median of positive comments were made by women using services there, and the deeper red, the lower the median for positive comments. We also used "weather map" type symbols, to identify more nuanced findings.[18] These symbols are shown in Figure 1, along with their definitions. Its focus on temporary and relative conditions was ideally suited to the complexity of the studied topic.

Results

From the total of 1000 participants to the Italian B3 Survey, 818 provided full data sets. The remaining 182 respondents (18.3%) did not contribute to the qualitative part of the survey (questions 14-17) or their open responses were invalid, or they did not give birth in the last 5 years. There were 5 respondents who gave birth slightly out of the survey's time frame, acknowledging this in the open questions. Their contributions were included in the study. 42 respondents answered the survey in non-Italian languages (Bulgarian 7, Croatian 2, Czech 2, Danish 1, English 5, Finnish 2, French 2, German 8, Greek 2, Lithuanian 1, Portuguese 1, Romanian 3, Slovakian 1 and Spanish 5). Their contributions were analyzed (after being translated) conjointly with those responding in Italian, since the numbers were not large enough to justify separate analysis.

Demographics

Table I, II illustrate the demographics of the respondents. Demographics of responders are quite similar to those of women giving birth in Italy in the same period, although there are some differences (see Discussion section).

Qualitative content analysis

The respondents used a wide range of words (in italics) to describe their needs in childbirth and their perception of care. In our analysis six thematic areas emerged:

- praised or desired general quality of maternity care;
- relations with care providers;
- phases of pregnancy and childbirth;
- impact of clinical practices on psychophysical outcomes;
- birth environment;
- qualitative expressions (adverbs) of evaluation.

Praised or desired general quality of maternity care

In the evaluation of the quality of maternity care, as perceived and/or desired by the respondents, it emerged that women highly value *professional* and *competent* care that they define as being *supportive*, *gentle/kind* and *respectful*. When talking about *support*, the respondents refer mainly to postpartum, especially breastfeeding support, as well as intrapartum. Terms related to *safety*, *risk* and *emergency* were significantly less frequent, suggesting that women might feel well assisted and secure in a *humane* environment, considering highly skilled and technically advanced provision of care a priority only when truly needed. The *humanity* of health care providers and of the facilities is seen as integral part of the assistance. The word *professionalism* is associated frequently with *humanity*, *gentleness/kindness*, *support*, *availability*, *competence* and *respect*. Women positively value the ability to express their *freedom* while in labor and birth, and they associate it with the *respect* of their choices and desires. One woman spoke positively of the "*understanding, humanity, gentleness, professionality of all*

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the staff," whilst another explained that "*You will not receive the kindness you deserve.*"

Women express their need of a specific type of assistance defined by *listening ability*, *empathy*, *understanding*, *trust*, *sweetness*, *patience*, *acceptance*, *need*, *love*, *nurturing*, *intimate*, *presence*. One woman described how "*The midwife that cuddled me in the delivery room was adorable, she stayed beyond her shift to help me until the end, and I really loved this! Also, in the ward I found available loving persons that continued to cuddle me and help me getting started with this marvelous role of being a mother!!!*"

Another woman suggested "*personalized professional maternal*" care shall be the positive change she'd like to see. Respondents distinguish between *polite* and *gentle*, giving a "cold" attribution to the first and "warm" to the second.

On the other side, even the best outcomes might not translate into a positive experience of birth when the environment and the assistance are perceived as *cold*, when women feel *abandoned*, not involved, not informed about the process and about hospital practices, or "*treated like numbers*." The emphasis on *coldness* perceived in maternity care inspired the "weather forecast" metaphor in geomapping. Given the high value placed on *human* qualities, or lack of them, the aspect of humanity was chosen as one of the major discriminants in defining the 10 variables.

Relations with care providers

Women clearly name the categories of healthcare providers they encounter in childbirth, giving an evaluation of each based on the relations they had with them. These include *midwives*, *doctors* (generally obstetricians, but also pediatricians and anesthesiologists) and (pediatric) *nurses*. Respondents also mention *husbands* as having an important role in assisting at birth.

The respondents lament the *lack of personnel* and the lack of a "*holistic*" or *shared vision* among different providers as structural and systemic issues influencing their experience. They feel that when there is a lack of personnel, the service is poor and the outcomes are worse. In the analysis of this category, we used "positive, but" and "negative, however" codes in order to spot interrelations. Thus, within the "positive" category, we noticed that there is still much scope for general improvement for both doctors and midwives, especially in their relations with childbearing women but also with colleagues, while pediatric nurses scored low in relation to breastfeeding support. One woman commented that she had a "*disappointing experience from all points of view with omissions and shortcomings from all professionals that I met.*"

On the contrary, when exploring the "negative" category, midwives make a significant difference in making the experience less traumatic. Quite a few respondents felt that the assistance they received depended on *luck*.

The most frequent term in the qualitative data is *midwife, midwives*. Women identify midwives as the main healthcare providers at birth, both in hospitals and at home. The two semantic categories attributed to midwives are related to *human* and *professional* aspects. The quality of midwifery care is perceived as interdependent with the quality of the relation established with a childbearing woman. The respondents perceive the act of birth as part of the overall process of motherhood, highly valuing continuous support and continuity of care, from conception throughout early childhood, for both the mother and the baby. In this aspect they seem to be more satisfied with the care received by midwives, compared to that of gynecologists, obstetricians or other providers. One women noted: "*My gynecologist came to the delivery room even though he doesn't work in that hospital. He was kind, but in hindsight I would have done better only with midwives*."

Phases of pregnancy and childbirth

Although the questions of the B3 Survey generally addressed the intrapartum period, women identified their needs and valued their experiences in relation to all phases of childbirth. The word *breastfeeding* is the second most frequent term in the whole data set, and it seems to have a decisive role in the overall satisfaction with childbirth. One woman commented that "*it would be desirable for nursery personnel* […] *to not treat children and mothers as 'numbers' but as persons.*"

Successful breastfeeding may compensate for a disappointing experience of labor and birth.

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The support received is highly appreciated, and the lack of it can add a sour note to what had been a perfect experience: "*The assistance in childbirth was PERFECT! ...but after, a disaster! Test weighting, threats to add infant formula, presumed excessive weight loss!*"

The attention to *breastfeeding* in our data set extends to *postpartum* and newborn care, but specifically to *rooming in* — an expression linked to the UNICEF's Baby Friendly Hospital Initiative — indicating the possibility of the baby staying with the mother after birth. Respondents specify that they do not want to be *left alone* with the baby. They want to receive caring support from a competent care provider to introduce them to the first steps of baby care and assist them when they need it, especially after interventions such as C-section and episiotomy.

Impact of clinical practices on psychophysical outcomes

When talking about the types of birth and clinical practices, the respondents most used terms are *natural* and *caesarean*. In relation to responses about the quality of care, the term *natural* is most associated with *respect*, *support*, *information* and *tranquility,* as well as with a positive experience of birth, while the term *caesarean*, is most commonly associated with *natural*, *information* and *support*, and is equally present in the positive and negative categories, suggesting that women generally prefer natural (physiological) birth but when they need or want a C-section, they appreciate receiving adequate information and support. One woman who had a planned C-section noted that with support she was "*very satisfied with the operation, with the care I received and with the support in taking care of my little one.*"

Women who gave birth at home or at the birth center (midwife-led unit) were predominantly enthusiastic about the experience and about the care they received, though they lamented the cost (of home birth) and the selective process and postpartum care (for birth centers). They wish many more women could access this type of care.

Women mention a series of birth practices, such as *epidural*, *induction*, *water birth*, (delivery) *positions*, *episiotomy*, *umbilical cord*, *placenta*, *skin-to-skin*, *VBAC*, *interventions*, (vaginal) *exams*, *lotus birth*, *Kristeller* (maneuver). *Epidural* is associated with positive experiences, though it was also significant in mixed and negative categories. One woman noted that epidural is *state of the art* and that it is done *routinely* but that it "*caused problems to me.*"

Water birth is appreciated, as well as *skin-to-skin* contact between the newborn and the mother immediately after birth, while *induction*, *episiotomy and Kristeller* are perceived as problematic. There is a particular focus on practices related to the *umbilical cord* and the *placenta*. Women deem delayed cord clamping/cutting as important and wish to have more information and control over the procedure. They wish for more detailed information on *cord blood donation* because, as one woman explained "*nobody explains what delayed cord clamping is.*" Women also express interest in *lotus birth* (umbilical cord non-severance).

Women with medical issues were significantly more likely to appreciate elements related to medical *intervention*, such as the presence of an *obstetrician*, *readiness*, *safety* and *competence*. On the other hand, they were also more likely to refer the need to change some elements of care including *professionalism*, and the capacity of *listening* and *caring* of attending personnel. Elements linked to humanity and hospital organization (*ward*, *nursery*, *breastfeeding*, *rooming-in*, *room*) were significantly over-represented both among "good" and "bad" things.

Birth environment

The facility where women give birth has a special value for them; they praise a clean, comfortable, intimate, tranquil and pleasant environment with proper, and possibly private toilet facilities. They like to have all maternity services available and appreciate hospitality, including good food. The need for warm and welcoming space is felt more in relation to postpartum, when women expect to be looked after, together with their newborn and their partner. One respondent noted that "*I would make the rooms more 'personal', less medical, more music*"; another that "*a comfortable and familiar environment helps a lot.*"

Big crowded rooms are felt to be inhospitable,

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with the lack of privacy and insufficient attention from service providers, a condition that makes them unsafe. The proximity of different birth settings — labor ward, delivery room, postpartum ward, nursery — facilitates a good experience. *Hygiene* is considered as a necessary component of a proper maternity service, and its lack is cause for many complaints. However, "*cold and sterile*" aesthetics of the environment is perceived as negative. Again, childbearing women express their preferences for a familiar environment, with a feeling of *home* adding to the hypothesis of a desired "maternal" childbirth assistance, even in regards to birth setting.

Qualitative expressions (adverbs) of evaluation

The responses show that women have strong feelings about their experience of birth. They predominantly use qualifying terms (adverbs) such as *none*, *nothing* and *great*, *too much*, more than *necessary* or *unnecessary*, confirming the importance of the perception of care for the service users and the emotional value of assistance in childbirth. It also denotes the way maternity care feedback should be analyzed, taking into the account the "extremes" (positive and negative) in order to find clues for improvements, capturing variation in women's experiences.

Geo-mapping

For the purpose of geomapping we identified 10 variables that would describe the overall perception of care in a nuanced way. This was done first identifying positive, mixed and negative categories, then the analysis was extended further, ranging from the most positive to the negative (1-3 positive, 4-8 mixed, 9-10 negative). For the complete description of the variables see Table V. Across all valid free-text responses, 66% were assigned to the positive category. The positive category has three variables where only the first one is devoid of any negative comments (23%). Only responses that clearly expressed a lack of satisfaction, as well as emotional and physical consequences of an inappropriate assistance were put in the negative category, forming a worrying 16.40% of the total. The mixed category (17.60%) constituted of responses that lacked a clear picture of the respondents' feelings about care, where positive and negative experiences went side by side but there was uncertainty over what prevailed for the respondent.

Respondents perceptions of maternity care were complex, the responses showing several degrees of nuanced feelings, and perceptions analysis was facilitated by a familiarity with the

TABLE V.—*Variables for geomapping.*

Categories	Variables	Properties	Example quote	%
Positive 66%	1	Totally positive, the respondent did not have any complaint, the overall response was full of praise and enthusiasm for the care she received. The assistance provided intrapartum, especially by midwives, played a crucial role, mainly for its *professionalism*. Home birth is significantly linked to this and to the following variable.	"*I wouldn't change anything about the assistance I received, the professionalism and the gentleness made everything perfect.*"	23%
	2	The overall experience was positive and the respondent was satisfied, but she had one suggestion for improvement, mostly related to the lack of breastfeeding support.	"*Sometimes in the maternity ward different providers responded to my queries (mainly in relation to breastfeeding) in different ways. My daughter had problems with latching and each professional offered a different solution.*"	20%
	3	The respondent was generally happy with the care she received but she added two or more suggestions or complaints. Major complaints regarded the midwives' assistance in labour and birth (lack of support), the state of the facility and the lack of breastfeeding support.	"*Positive experience. The facility was in a run-down state, but the personnel was smiling and welcoming. During my labour there were quite some births and all midwives were busy… for a few hours I didn't have anyone that could give me attention… they caught up greatly in the final phase.*"	23%

(To be continued)

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TABLE V.—*Variables for geomapping. (continues).*

Categories	Variables	Properties	Example quote	%
Mixed 17.60%	4	There were neutral or mixed positive and negative comments. The respondent's experience had positive and negative sides, but nothing prevailed.	"*The nursery dared administering the glucose and formula against my will; as my birth was exactly as I desired and wanted it, so the postpartum was traumatic for me.*"	1%
	5	The response did not show clearly if the experience was positive, there were more positive than negative comments, but negative were significant (unnecessary interventions, lack of support, hygiene, food etc.). The respondent highlights inappropriate assistance and structural issues, while still valuing positive sides.	"*I am not a doctor but I am wondering if the episiotomy is really necessary… I had quite a few stitches after birth resulting in significant discomfort for several months…*"	4.80%
	6	There were positive statements, but negative comments prevail by number and by resentment. The unhospitable environment, insufficient intrapartum assistance and lack of breastfeeding support were significant, together with the emphasis on the care provided by midwives, that made a difference both in positive and in negative sense.	"*My maternity path was fantastic, beautiful pregnancy and also birth, I found a great environment in the delivery room, while in the ward you are completely on your own. Luckily, I didn't need anything and I managed it all by myself, from tears to discharge and breastfeeding… I could have done it all easily at home, after birth it would have been better, at least I would have been together with my baby all the time.*"	8.40%
	7	This variable's determinant is the lack of humanity, along positive and negative comments. The lack of humanity is strongly felt by the respondent and it has a major influence on her experience of birth, both in a positive and in a negative way.	"*I suffered many decisions. I had providers who were gentle and understanding and providers without soul. I would have preferred more support and information. I was not informed about breastfeeding and I suffered greatly.*"	2.40%
	8	Positive and negative comments, with negative feelings. The respondent values positive sides, but shows discrete resentment for negative experiences, mainly related to the lack of respect for her choices.	"[Best] *The midwife met my demands.* [Change] *They didn't even want to read my birth plan.*"	1%
Negative 16.40%	9	There is a prevalence of negative comments related to the overall assistance. The clinical practices were deemed inappropriate, the respondent felt insufficiently involved in care, expressing strong resentment and anger. The experience had emotional and physical consequences.	"*I risked my life. In 2014. In a first-class hospital. Only because the doctor put the protocols before what I was saying. I don't think I feel like having another child. I was treated badly, not listened to, not supported and I risked my neck. I still suffer from depression due to this experience.*"	8%
	10	The overall care was considered extremely negative from all points of view, with the emphasis on the lack of humanity from health providers and the environment. The clinical practices were deemed inappropriate, the respondent felt insufficiently involved in care, expressing strong resentment and anger. The experience had emotional and physical consequences.	"*I endured my birth, rather that lived it. I felt hurt and powerless. In order to guarantee security to my son's birth I went through a nightmare. [...] I still haven't overcome the feeling of solitude and subjection that I experienced, and the delusion of not having had a physiological birth. I didn't feel at ease, I couldn't trust. I suffered the decisions undertaken by the ones who were supposed to take care of our lives. The maternity ward was terrible. Shared bathrooms and tens of rooms. I couldn't take a shower in a week. I had to wash myself with bottles of water over the toilet and I couldn't close the door! I think I was lacking the sense of civilization. I wish I could contribute for a better experience of birth.*"	8.40%

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nature of birth storytelling. Particular care was applied in order to equally value positive and negative experiences, based on the following criteria:

• number of positive and negative comments and suggestions;

• expressions of emotions emerging through the analysis of both the content and the form of the text;

• declared presence or lack of humanity;

• influence of clinical practices on the psychophysical outcomes, as expressed by the respondents.

It emerged, for example, that common items for the evaluation of maternity health care - such as clinical appropriateness — were not as pertinent for the respondents as other, more subjective ones — such as humanity. Thus, women described a positive experience of birth even if they experienced a range of clinical practices including rupture of the membranes, labor augmentation, episiotomy, Kristeller maneuver, C-section or prolonged removal of the baby. Respondents identified concerns over the quality of the assistance they received, especially in relation to the care they wanted or imagined, type of providers, clinical procedures, birth environment, and the support they received in different stages of the childbearing process (see Qualitative content analysis section).

Figure 1 shows the average (median) perception of care by region. Darker shades of green illustrate more positive median scores whilst darker shades of red indicate more negative birth experiences as described previously. The regions in the north appear to predominantly have more positive experiences whereas the southern regions tend towards the negative scores. The autonomous region of Trentino-Alto Adige has a major concentration of positive experiences, followed by Toscana and Valle d'Aosta.

Figure 1 provides a description of each weather icon based of the division in 10 variables. The map shows that 9/20 regions belong in the mixed category (scored on average 4-8). This is because most of the 20 regions had relatively small response rates and contained both highly positive and negative scores gravitating the median towards to the central score, in this case the "mixed" categories. Figure 2 shows bar graphs for the scores from the 20 regions. It is clear from this that some regions have very positively skewed scores but still have some negative scoring which pulls the average towards the "mixed" score. Other regions have low uniform scoring which can also adjust the median towards the "mixed" category.

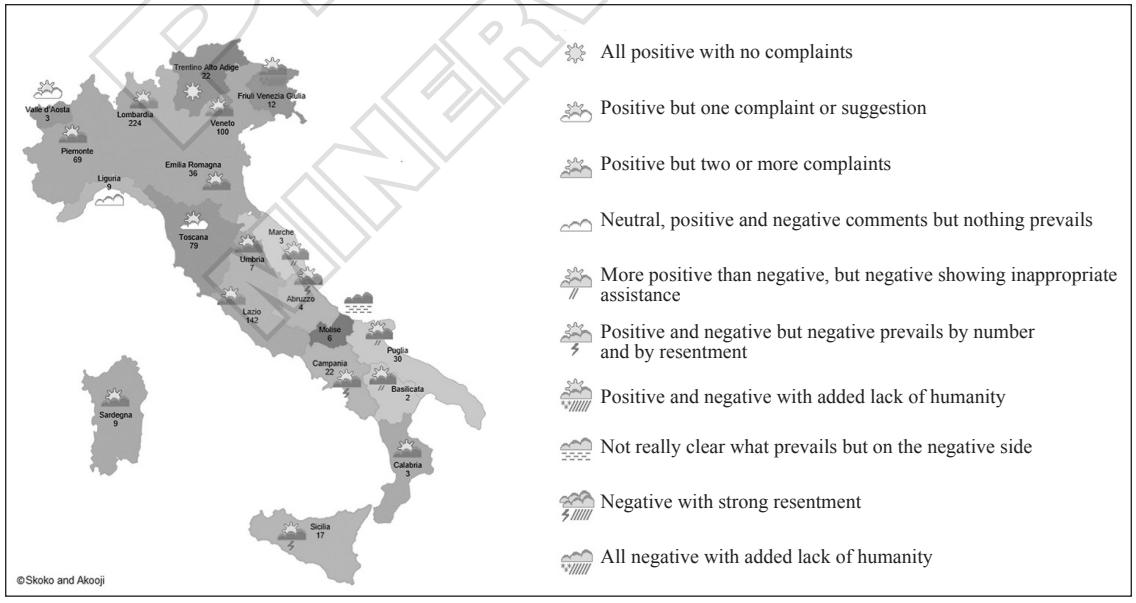

Figure 1.—Geomapping of Italy by region and "weather".

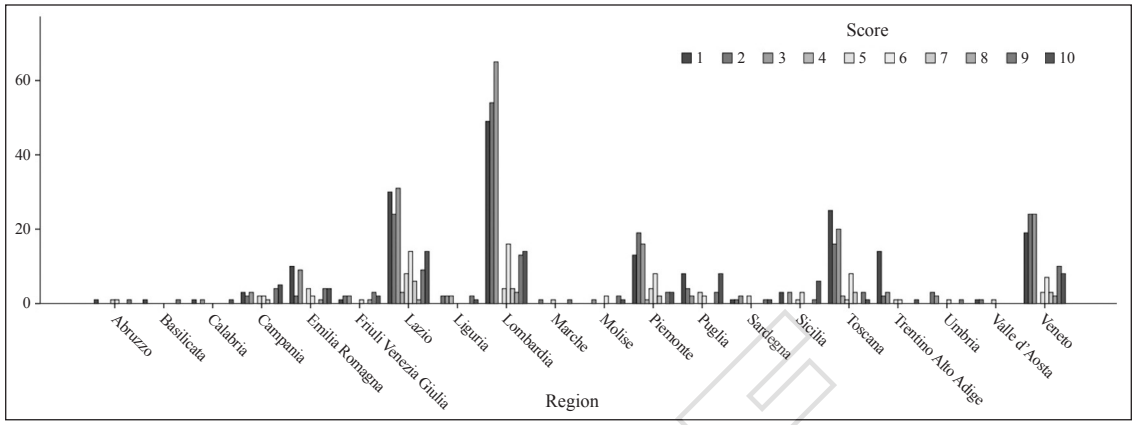

Figure 2.—Bar graphs of variables' score by region.

Discussion

The main themes that emerged from our data set (desired quality of care, relations with care providers, phases of pregnancy and childbirth, impact of clinical practices on psychophysical outcomes, birth environment, overall evaluation) indicate that women want kind, compassionate and skilled care. A recent systematic qualitative review (highlighted in the WHO intrapartum recommendations),[1] investigating what matters to women during childbirth,[19] found that women around the world value a positive experience of childbirth that fulfils or exceeds their prior personal and socio-cultural beliefs and expectations. They expect to give birth to a healthy baby in a clinically and psychologically safe environment with practical and emotional support from birth companions, and competent, reassuring, kind clinical staff. Most women want a physiological labor and birth, if intervention was needed women want to retain a sense of personal achievement and control through active decision-making. These expectations were mediated through women's embodied (physical and psychosocial) experience of pregnancy and birth, local, familial and sociocultural norms, and encounters with local maternity services and staff. The results of our research are in line with the findings of the review. Compassionate and respectful maternity care is one of the most important facilitating factors for a positive maternal experience of labor and birth. As Downe *et al.* have argued "*women experience pregnancy, birth, and the postnatal period as a psychological and physical continuum, and not as three distinct and unrelated states,*" and as such women want to be treated in a holistic sense, as unique and whole individual across the whole of this continuum.

Beyond this sense of the childbirth episode as part of a continuous maternity process, respondents distinguished between care that was perceived as merely *polite* and that perceived as *gentle*. Politeness was experienced as a basis for transactional relationships (which other authors have suggested may protect practitioners from litigation).[20] In contrast, the care that was described by women with more affective, positive, emotional words suggests that a genuine and honest loving attitude is associated with transformational relationships that have the potential to greatly enhance women's positive experiences. Qualitative research addressing obstetricians' perception of care at the national level, show that a deliberate "icy" attitude, enacted by medical professionals, is, on the contrary, strongly associated for them to the idea of being professional.[21] The association of the term *professionalism* with transactional or transformational relationships is an important finding, and could form the basis of ongoing discussion with health professionals, policy makers and maternity service users.

Based on our findings, women appear to expect the overall tenor of maternity health care to be literally motherly: resembling the kind of care given by a mother. Moreover, they want to experience the kind of care as that provided by a family member (the word *gentleness* from the Latin

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term *gens, gentilis*, "of the same family or clan," as well as *kindness*, "with the feeling of relatives for each other").[22] Our hypothesis is that it is precisely a maternal care that can make the experience of childbirth assistance more or less humanized, where the action of mothering, as respondents intend it, is perceived as a respectful, competent and genuine nurturing and caring attitude towards a person that has an intrinsic value for the carer.[23]

The role of the midwife seems to be important in this regard, for the relational continuity and the holistic approach provided by the art of midwifery.[24] Midwives in Italy are present at 95.7% of births,[11] yet their role is not clear and the model of care they provide is not well defined. Indeed, many women seem to have a wide range of practitioners at their births. According to a 2018 report from the Italian Ministry of Health, as well as midwives, obstetricians/gynecologists are present at over 88% of all births; 44.5% are attended by anesthetists, 68% by paediatricians.[11] This does seem to be a significant overuse of scarce health care resources, for an event that largely includes healthy women and babies, though it is confounded by the high Italian caesarean section rate, for which medical professionals with various skill sets are required. The perception of care expressed by Italian obstetricians,[21] when seen alongside the views expressed by women in our data set, confirms that neither of the participants at birth are happy in a maternity health system that does not value human qualities, cooperation and respect.

Respondents expressed significant interest in breastfeeding. This may relate to the fact that there has been an increased awareness of breastfeeding among childbearing women and civil society in Italy. However, only 26 out of about 500 national maternity hospitals obtained the UNICEF's "Baby Friendly" qualifications,[25] and even those failed to produce optimal results,[26] confirming the need for the ongoing involvement of mothers and communities in the evolution of hospital policies to allow them to meet the needs of women and their newborns.

The results of the geomapping in the present study, though conducted with a different approach, are surprisingly similar to that of the results from the German B3 data set,[12] both showing 23% of exclusively positive experiences, and a few regions clearly standing out with high proportions of positive comments. In both cases, humane maternity care and midwifery support tended to be highly valued. In general, findings from our qualitative analysis match those conducted on B3 data sets from other countries previously mentioned, especially with the Portuguese study that used the same methods,[15] suggesting that women across nations have similar needs and expectations of maternity care, and those are based on intrinsic human values. The results of the analysis of B3 data sets, as suggested by Weckend, may also be used as valid proxy measures for patient-centered policies within maternity care, specifically the relationship with the carer, personal involvement in care decisions, continuity of care and the quality of care facilities.

The B3 Survey has some limitations as an internet-based survey with the sample being self-selected and not randomized. This issue is reflected by demographics of the sample: among Italian B3 responders, women aged 30-39 are more represented (69% *vs.* 59.6%) and women aged <20, 20-29 or >40 are less represented (0.4% *vs.* 1.3%; 24.4% *vs.* 29.4% and 6.1% *vs.* 9.63%, respectively) than in general population of women giving birth in Italy in 2015.[11] Furthermore, according to the place of birth, B3 responders were more likely to live in northern and central Italy (N 59.4% *vs.* 45.4%; C 28.9% *vs.* 19.5%; S 11.6% *vs.* 35.1%), particularly in north-west regions (38.2% *vs.* 26.2%). This difference is not unexpected since the digital divide between Italian regions is a well-known problem, with Italy ranking 25th out of the 28 EU Member States, according to Europe's Digital Progress Report, due to lack of connectivity and use of internet in rural areas and southern regions.[27] Women reporting problems in pregnancy seem also to be over represented (19.5% *vs.* 9.4%) compared to official national figures.[11] However this difference may be due to the fact that in the B3 survey women are self-reporting medical issues from pregnancy to childbirth, whereas the CeDAP figures are reported by medical professionals after childbirth, without continuity of care or shared digital medi-

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cal records. Despite these differences, the study provides a valuable insight into women's views of their maternity care in countries such as Italy where these data are rare.

Conclusions

This paper provides unique insight into the maternity care experiences of women who gave birth in Italy between 2010 and 2015. It foregrounds the voices of women who have previously been largely absent in discussions of maternity care in Italy. It uses a range of innovative methods to analyze and present women's voices, and represents an important collaboration between activists, national and international academics and healthcare professionals committed to improve maternity care for women in Italy. It demonstrates that many women have positive experiences, largely framed by their encounters with respectful, supportive care. However, less positive experiences persist. Regions with very high levels of positive comments from respondents could provide a basis for understanding and learning from good practice, and for translation of this practice across Italy.

In light of the findings of the present study the authors recommend a participatory approach to maternity care, including effective communication and engagement among health care providers, health service managers, women and representatives of women's groups and women's rights movements, as recommended by the WHO.[1] Implementation of international initiatives and recommendations for improving childbirth and breastfeeding assistance, including respectful maternity care,[1] within the maternity care system, and as part of the education of medical professionals, are needed. There is a need for nationally defined policies that value continuity of care and a midwifery model of care, including education and employment of more midwives, creation of midwife-led units and the reimbursement of home birth in all regions. The government shall implement systematic verification and publication of childbirth outcomes data, including users feedback, for all regions and all facilities, based on the principle of accountability; ensure effective complaint and dispute systems within each medical trust; and renovate existing birthing facilities based on the principles of hygiene, privacy and hospitality.

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