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ABSTRACT

This study had two aims: (1) to explore the types and incidence of obstetric violence (OV) in a group of Italian women, as well as associated socio-demographic factors; and (2) to assess whether OV affects women's mental health (e.g. psychological distress and post-traumatic stress). A web-based cross-sectional study was conducted with 282 Italian women. Women answered questions on socio-demographic factors, childbirth characteristics, OV and mental health. Multiple linear regression analyses assessing the predictive role of socio-demographic and childbirth characteristics on OV were conducted. Additionally, hierarchical multiple linear regression analyses assessing whether OV affected women's mental health were also carried out. More than three quarters of the sample (78.4%) had experienced at least one type of OV (55.5% of non-consented care and 66.4% of abuse and violence). The factors most associated with OV were younger age, low educational level, not having attended a prenatal childbirth preparedness course, and having given birth naturally. The form of OV that most affected women's mental health was that linked to abuse and violence rather than non-consented care. Study findings shed light into addressing OV from a multidimensional perspective.

Introduction

Over the course of the last decade, growing scientific and political attention has been given to the disrespect and abuse experienced by women during childbirth (World Health Organization [WHO] 2015), to the point at which WHO (2018) advanced a call for respectful intrapartum care worldwide. This phenomenon is increasingly recognised internationally as obstetric violence (OV). Garcia (2020, 661) has recently provided the following definition of OV:

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> Abuse or mistreatment by a health care provider of a female who is engaged in fertility treatment, preconception care, pregnant, birthing, or postpartum; or the performance of any invasive or surgical procedure during the full span of the childbearing continuum without informed consent, that is coerced, or in violation of refusal.

Although there remains discussion about the concept, leading some midwives and obstetricians/gynaecologists to perceive the concept as stigmatising, this construct has signalled the existence of unnecessary and harmful practices with respect to a woman's health. Indeed, the concept of OV is increasingly used to indicate actions, conduct or omissions that dehumanise pregnant women and violate their rights within the healthcare system (Martínez-Galiano et al., 2020). Concretely, OV may manifest in physical or verbal abuse during childbirth, obstetric procedures undertaken without consent, the violation of privacy, and non-recommended clinical practices (e.g. episiotomy, pressure on the abdomen, etc.) (Ravaldi et al., 2018; Sando et al., 2017). More recently, OV has been characterised as a form of gender-based violence, inscribed within a broader discourse of structural inequality, discrimination, patriarchy and lack of access to equality and women's human rights (Šimonović, 2019).

Most of the literature on the mistreatment of women during pregnancy derives from research in developing countries (Savage & Castro, 2017). For example, a recent review showed that 75% of 24 articles published between 2011 and 2017 made reference to Latin American countries (i.e. Brazil, Argentina, Venezuela and Mexico; Jardim & Modena, 2018). However, several studies on OV in industrialised countries have been recently published, documenting high levels of abuse and mistreatment in both the public and private healthcare sectors (Baranowska et al., 2019; Mena-Tudela et al. 2020a; Ravaldi et al., 2018; Rice et al., 2020; Vedam et al. 2019).

The scarcity of studies, the diversity of methods and measures used, and the lack of a standardised definition of OV make it difficult to determine the prevalence of the phenomenon. Indeed, Martínez-Galiano et al. (2020) report a very wide variation in prevalence, from 15% to 91% depending on the context. However, it is clear that OV is associated with particular socio-demographic factors, such as age, ethnicity/race, educational and socioeconomic status, employment, living in a rural area, type of childbirth, and facility (Baranowska et al., 2019; Hameed & Avan, 2018; Martínez-Galiano et al., 2020; Vedam et al. 2019).

In Italy, only one prior study has been conducted to our knowledge. Specifically, Ravaldi et al. (2018) recruited a sample of 424 women with children aged 0–14 years. The authors reported that 21.1% of the recruited women considered themselves to be the victims of OV, 33% felt inadequately supported during childbirth, 34.5% felt their privacy had been denied, 14.5% decided to not return to the same facility, 5.9% said they are not going to have any more children because of the treatment received and 54.24% were subjected to an episiotomy, which is a practice that can cause bleeding, perineal pain, bruising or oedema, vaginal haematoma, anal sphincter damage and dyspareunia when used excessively or unnecessarily (Fodstad et al., 2013). However, while strongly suggestive Ravaldi et al. (2018) study has been criticised on methodological grounds, particularly for the sample characteristics and the use of a questionnaire that had not been validated previously (Lauria et al., 2018).

Finally, the association between OV and mental health problems has received little attention. A study conducted in Brazil found that those experiencing OV were more likely to report postpartum depression at three months postpartum than their counterparts (Silveira et al., 2019). In contrast, a study of 1,531 women in Spain assessed the association between post-traumatic stress disorder one year after childbirth and OV, finding that such a disorder was negatively associated with respectful clinical practices and the adoption of a person-centred approach (Hernández-Martínez et al., 2020). In Italy, to our knowledge, no previous research has assessed the potential effects of OV on women's mental health.

Thus, the current study had two main aims. The first was to analyse the types and incidence of events occurring during childbirth that were perceived by a sample of Italian women as OV, as well as their socio-demographic correlates. The second aim was to examine whether these events affected women's mental health in the form of psychological distress and post-traumatic stress. We hypothesised that a higher incidence of OV would be associated with more psychological distress and greater levels of post-traumatic stress.

Materials and methods

Procedures and participants

The study took the form of a cross-sectional survey distributed through online social networks (e.g. on Facebook) with a focus on maternity and reproductive health issues. Participants were also recruited via mailing lists to professionals working in university and community settings, and to professional associations of midwives who were asked to share information about the survey within their networks.

By clicking on the link provided, participants gained access to the first page of the survey where they could read about the study, its objectives, benefits and risks and provide their consent. To avoid missing data, all questions had to be answered. We also informed participants about the anonymity of the study and the aggregate level at which data would be analysed.

The study was approved by the Ethics Committee of the University of Naples Federico II (protocol number: 31/2020) and was conducted in line with Declaration of Helsinki and European General Data Protection Regulation requirements. Confidentiality was assured using a protected gateway to which only the principal investigator had access.

Participants were recruited between the end of December 2020 and the end of January 2021. Inclusion criteria were: (1) having given birth at least once; (2) being over the age of consent ($\geq$18 years old); (3) living in Italy; and (4) having given birth in Italy. A total of 282 women participated in the study.

Measures

Sociodemographic characteristics
Sociodemographic variables assessed in the study included age, ethnicity (Caucasian, Afro-American, Hispanic/Latina, Asian, or other with specification), level of education

(high school or less vs. college or more), annual income, civil status (recategorised as 'with partner' vs. 'with no partner'), type of childbirth (natural vs. Caesarean), having participated in a prenatal childbirth preparedness course (yes vs. no), parity (primiparous vs. multiparous), type of facility in which the birth took place (public vs. private) and time elapsed from the last childbirth. With regards to this last variable, because the range was very large (from < 1 year to 27 years), six age ranges were created, as follows: (1) <1 year; (2) 1–5 years; (3) 6–10 years; (4) 11–15 years; (5) 16–20 years; and (6) >20 years. Finally, we also asked participants to clarify the time elapsed since birth, with the aim of assessing potential differences between women giving birth during the COVID-19 pandemic and those who did not.

Obstetric violence

OV was measured using the questionnaire developed by Castro and Frías (2020) in Mexico. The questionnaire was translated into Italian using the back-translation procedure (Behling & Law, 2000). After this procedure, a focus group involving four obstetricians was conducted to discuss the clarity and comprehensibility of each item in the questionnaire. No major problems were identified. The questionnaire consisted of 13 items with a yes/no response, constituting two factors (i.e. abuse and violence, and non-consented care).

The first of these factors was measured via six general items measuring coercion to stay in an uncomfortable position; refusal to anaesthetise or administer a pain blocker without providing an explanation; shouting and scolding; offensive behaviour and humiliation; being ignored when information about the birth or the child was requested; and taking too long to provide assistance because of screams and complaints. This factor also included two items relevant to natural childbirth and asked whether participants had received pressure on the abdomen (i.e. the Kristeller manoeuvre) with the goal of speeding up the childbirth, or an episiotomy.

The second factor assessed the incidence of medical procedures that are performed without a woman's consent to, and full knowledge of, the risks involved. The factor was assessed by: (a) two general items measuring whether participants were encouraged to have an intrauterine device inserted or undergo permanent sterilisation, and whether they were forced to sign a document without informed consent; (b) one item asking whether continuous electronic foetal monitoring took place during labour despite a low-risk pregnancy; and (c) two items about Caesarean-section, asking whether the information provided about a Caesarean birth was adequate and permission was given to perform the procedure.

Each factor was calculated as the sum of the answers for each item, so that the range of the first factor could vary from 0 (= no forms of abuse) to 8 (= all forms of abuse), and the range for the second factor from 0 (= no forms of non-consented care) to 6 (= all forms of non-consented care). High scores on both factors indicate high levels of OV. Internal reliability assessed through Cronbach's α in the sample of this study was 0.72 for the first factor, 0.71 for the second factor and 0.71 for the total scale. The internal reliability obtained in the original version was 0.73 for the total scale.

Psychological distress

Psychological distress was measured using the Depression Anxiety Stress Scales (DASS–21; Lovibond & Lovibond, 1995; Italian version by Bottesi et al., 2015), a measure consisting of 21 items that assess distress along three different axes (i.e. depression, anxiety and stress). The answer options range from 0 ('Did not apply to me at all—Never') to 3 ('Applied to me very much, or most of the time—Almost always'). Delivery was tailored to the objectives of the current study as follows: 'Please read each sentence and then indicate how often the situation described occurred in the days following the birth you have had in mind in answering questions on childbirth'. High scores indicate high distress. The Cronbach α for the total scale was 0.96.

Post-traumatic stress

Post-traumatic stress was measured using the Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997; Italian version by Pietrantonio et al., 2003), a scale consisting of 22 items evaluating post-traumatic symptomatology. Specifically, the IES-R assesses three aspects of post-traumatic stress: avoidance, intrusiveness and hyperarousal. Response options range from 0 ('not at all') to 4 ('extremely'). The IES-R is a useful for quantifying stress reactions following a series of traumatic events. Delivery was tailored to the objectives of the current study as follows: 'Below is a list of difficulties people sometimes have after stressful life events. Thinking about the birth you had in mind by answering the previous questions, please read each item and indicate how distressing each difficulty has been for you'. High scores indicated high post-traumatic stress. The Cronbach's α in the study sample was 0.96 for the total scale.

Statistical analyses

All statistical analyses were conducted using SPSS version 26, setting the level of significance at 0.05. First, we analysed participants' sociodemographic characteristics and frequency distributions for OV. Second, we conducted a one-way ANOVA to analyse the effect of the time elapsed since childbirth on OV and mental health, as the range was very large (a few weeks to 27 years). Similarly, since the age range in this study was large (18–60 years), we divided the sample into 5 ranges (18–24, 25–34, 35–44, 45–54 and 55–60) and, based on work by Ravaldi et al. (2018), performing another one-way ANOVA to compare the effect of age on both OV and mental health.

Additionally, since restrictions imposed by the COVID-19 outbreak have changed some medical practices in the field of obstetrics (e.g. prohibition of a partner being present during labour, immediate separation of the mother from the new-born, and the prevention of breastfeeding in hospital) and these practices may have been perceived by some women as forms of OV (Sadler et al., 2020), we used the Student's t-test to assess potential differences in OV and mental health between two groups: (1) women who gave birth before the COVID-19 outbreak (i.e. before 10th March 2020, the day on which Italy entered the first national lockdown; $n = 226$) and (2) women who gave birth during the COVID-19 outbreak (i.e. after 10th March 2020; $n = 56$).

Third, we conducted two multiple linear regression analyses in which socio-demographic factors and childbirth characteristics were considered as independent variables

and the two OV factors as dependent variables, separately. Ethnicity was not included in the models due to its low variance in the sample. Only 7 non-Caucasian women out of 282 took part in the survey.

Finally, we calculated correlations between OV and mental health using the Pearson's coefficient and then performed two other hierarchical multiple linear regression analyses assessing whether OV affected women's mental health. In these models, demographics were entered in step 1 as covariates and OV factors in step 2, and DASS-21 and IES-R were instead considered as dependent variables, separately.

In all hierarchical multiple linear regression analyses, Cohen's f^2 method was used as a measure of effect size, with $f^2 \geq 0.02$, $f^2 \geq 0.15$ and $f^2 \geq 0.35$ representing small, medium and large effect sizes, respectively (Cohen, 1988). To avoid problems of multicollinearity, variance inflation factors (VIF) were calculated to control how much the variance of the estimated regression coefficients increased when predictors were correlated. VIFs near or above 5 are accepted (Akinwande et al., 2015).

Results

Participants characteristics

Participants ranged in age from 18 to 60 years ($M = 37.09$; $SD = 8.30$). Most women were Caucasian ($n = 275$; 97.5%), partnered ($n = 244$; 86.5%), highly educated ($\geq$college; $n = 155$; 55.1%), and had a low-medium income (calculated as the total of the first three income classes; $n = 229$; 81.2%).

Additionally, with respect to characteristics related to experiences of childbirth, most women were primiparous ($n = 182$; 64.5%), gave birth naturally ($n = 177$; 62.8%) and in a public facility ($n = 211$; 74.8%) and about half of the women ($n = 153$; 54.3%) had attended a prenatal childbirth preparedness course. Finally, with regards to time elapsed since the last childbirth, this was between 1 and 5 years in most cases ($n = 159$; 56.4%).

Full demographic and childbirth-related characteristics are reported in Table 1.

Types and incidence of obstetric violence

Types and incidence of OV reported by participants are described in Table 2.

With regards to the first OV factor (i.e. Abuse and violence), independently of the type of childbirth (natural vs. Caesarean), the most prevalent type of reported abuse was shouting and scolding, followed by coercion to stay in an uncomfortable position, being ignored when information about the birth or the child was requested, refusal to anaesthetise or administer a pain blocker without providing an explanations, and offensive behaviour and taking too long to provide assistance because of screams and complaints.

With respect to the second OV factor (i.e. non-consented care), independently of the type of childbirth (natural vs. Caesarean), a very low percentage of women stated they had been pressured to accept the insertion of an IUD or undergo permanent sterilisation to avoid further pregnancy or having been forced to sign a document without being given adequate explanation.

Table 1. Participants' socio-demographic and childbirth characteristics ($N = 282$).

	$M \pm SD$ or n (%)
Demographics	
Age	37.09 ± 8.30
18–24 years	11 (3.9)
25–34 years	114 (40.4)
35–44 years	107 (37.9)
45–54 years	38 (13.5)
55–60 years	12 (4.3)
Educational level	
≤High school vs. ≥College	127 (45) vs. 155 (55)
Ethnicity	
Caucasian vs. non-Caucasian	275 (97.5) vs. 7 (2.5)
Partner	
Yes vs. No	244 (86.5) vs. 38 (13.5)
Annual income	
None	47 (16.7)
Up to 15,000€	79 (28)
15,001–28,000€	103 (36.5)
28,001–55,000€	46 (16.3)
55,001–75,000€	4 (1.4)
More than 75,000€	3 (1.1)
Childbirth characteristics	
Parity	
Primiparous vs. multiparous	182 (64.5) vs. 100 (35.5)
Type of birth	
Natural vs. Caesarean	177 (62.8) vs. 105 (37.2)
Type of facility	
Public vs. Private	211 (74.8) vs. 71 (25.2)
Prenatal childbirth preparedness course	
Yes vs. No	153 (54.3) vs. 129 (45.7)
Time elapsed since childbirth	
<1 year	56 (19.9)
1–5 years	151 (53.5)
6–10 years	15 (5.3)
11–15 years	26 (9.2)
16–20 years	15 (5.3)
>20 years	21 (7.4)
Childbirth occurred before and during the Covid-19	
Before vs. during	56 (19.9) vs. 226 (80.1)

Note. M = Mean; SD = Standard deviation.

Table 2. Types and incidence of obstetric violence.

	n (%)
Factor 1—Abuse and violence	
Forced to stay in an uncomfortable position	67 (23.8)
Refusal to anaesthetise or administer a pain blocker without providing an explanation	50 (17.7)
Shouting and scolding	71 (25.2)
Offensive behaviour and humiliation	40 (14.2)
Being ignored when information about the birth or the child was requested	63 (22.3)
Taking too long to provide help because of screaming and complaints	40 (14.2)
Pressure on the abdomen with the goal of speeding up childbirth[a]	85 (48)
Episiotomy[a]	96 (54.2)
% of participants who had experienced at least one type of abuse	187 (66.3)
Factor 2—Non-consented care	
Pressure to have an intrauterine device inserted or permanent sterilisation to avoid further pregnancy	3 (1.1)
Forced or threatened to sign a document without prior information	11 (3.9)
Continuous electronic foetal monitoring despite a low-risk pregnancy[a]	119 (67.6)
Inadequate information on the reason for Caesarean section[b]	25 (23.8)
Lack of permission or authorisation for Caesarean section[b]	14 (13.3)
% of participants who have experienced at least one type of non-consented care	157 (55.7)
Total score for obstetric violence	
% of participants who have suffered from obstetric violence	221 (78.4)

[a]Percentage calculated on the total of participants who gave birth naturally.
[b]Percentage calculated on the total number of participants who gave birth by caesarean section.

Table 3. Comparison of means between different age ranges with respect to obstetric violence and mental health.

	N	M (SD)	95% CI	F	p
Abuse and violence					
18–24 years	11	3.54 (2.25)	2.03, 5.06	3.67	0.006
25–34 years	114	2.01 (1.95)	1.66, 2.38		
35–44 years	107	1.58 (1.89)	1.22, 1.94		
45–54 years	38	1.34 (1.55)	0.83, 1.85		
55–60 years	12	1.92 (1.78)	0.78, 3.05		
Non-consented care					
18–24 years	11	1.28 (0.47)	0.96, 1.59	6.92	<0.001
25–34 years	114	0.69 (0.58)	0.58, 0.81		
35–44 years	107	0.48 (0.55)	0.37, 0.58		
45–54 years	38	0.48 (0.56)	0.29, 0.66		
55–60 years	12	0.83 (0.58)	0.47, 1.20		
DASS-21					
18–24 years	11	25.00 (19.72)	11.75, 38.25	4.40	0.002
25–34 years	114	18.55 (15.70)	15.64, 21.47		
35–44 years	107	13.39 (13.41)	10.82, 15.96		
45–54 years	38	10.29 (9.24)	7.25, 13.33		
55–60 years	12	15.75 (11.82)	8.24, 23.26		
IES-R					
18–24 years	11	26.82 (22.29)	11.84, 41.79	4.82	0.001
25–34 years	114	20.19 (18.61)	16.74, 23.64		
35–44 years	107	14.30 (16.57)	11.12, 17.48		
45–54 years	38	9.00 (10.60)	5.52, 12.48		
55–60 years	12	13.25 (12.46)	5.33, 21.17		

Note. M = Mean; SD = Standard deviation; CI = Confidence Interval.

Higher percentages of OV were found among women who gave birth naturally. Indeed, almost half of them stated they experienced pressure on the abdomen to speed up the childbirth, while more than half of the sample had received an episiotomy. On the other hand, among women who gave birth by Caesarean-section, nearly one quarter of the sample reported that they did not feel adequately informed about the reason for Caesarean birth, while 13.3% ($n = 14$) had not provided permission or authorisation for a Caesarean-section.

Overall, 66.3% ($n = 187$) and 55.7% ($n = 157$) of the sample said they had experienced at least one type of abuse or non-consented care, respectively. Considering the two factors together, 78.4% ($n = 221$) of the sample said they had suffered from at least one type of OV.

Relationship of time since from childbirth, age and COVID-19 pandemic with obstetric violence and mental health

The one-way ANOVA undertaken to compare the effect of time elapsed from childbirth on OV and mental health revealed no statistically significant associations. Findings were as follows: (1) abuse and violence [$F(2, 276) = 1.46$, $p = 0.203$]; (2) non-consented care [$F(2, 276) = 1.87$, $p = 0.100$]; (3) DASS-21 [$F(2, 276) = 1.71$, $p = 0.132$]; and (4) IES-R [$F(2, 276) = 1.93$, $p = 0.121$].

The one-way ANOVA performed to compare the effect of age on OV and mental health revealed there were significant effects of age on all dependent variables (all ps were <0.05). Participants from 18 to 24 years presented higher means on both OV and negative mental health outcomes than other groups (Table 3).

Table 4. Regression of socio-demographic characteristics on obstetric violence.

	Abuse and violence			Non-consented care		
	B(SE)	β	95% CI	B(SE)	β	95% CI
Age	−0.02(0.02)	−0.10	−0.07, 0.02	0.01 (0.01)	0.06	0.01, 0.02
Education (≤high school)	−0.48 (0.25)	−0.12	−0.97, 0.02	−0.20 (0.07)	−0.17**	−0.35, −0.06
Annual income	0.12 (0.12)	0.07	−0.12, 0.36	−0.02 (0.04)	−0.03	−0.09, 0.06
Partner (no)	−0.40 (0.33)	−0.05	−1.06, 0.26	−0.08 (0.10)	−0.05	−0.28, 0.11
Childbirth (natural)	−0.68 (0.25)	−0.17**	−1.16, −0.19	−0.29 (0.07)	−0.25***	−0.44, −0.15
Prenatal childbirth preparedness course (no)	−0.15 (0.24)	−0.04	−0.62, 0.31	0.11 (0.07)	0.09*	0.02, 0.25
Parity (primiparous)	−0.03 (0.40)	−0.01	−0.82, 0.76	−0.12 (0.12)	−0.10	−0.36, 0.11
Facility (private)	−0.26 (0.26)	−0.06	−0.79, 0.26	0.02 (0.08)	0.01	0.14, 0.17
	$R^2 = 0.05$; $F = 3.00$**			$R^2 = 0.09$; $F = 4.43$***		

Note. B = Non-standardised regression coefficients; SE = Standard error; CI = Confidence intervals; $β$ = Standardised regression coefficients; R^2 = R-square.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

Finally, the Student's t-test did not reveal any statistically significant differences in OV (abuse and violence: $t = -1.69$, $p = 0.09$; non-consented care: $t = -0.21$, $p = 0.83$) and mental health (DASS-21: $t = -0.61$, $p = 0.54$; IES-R: $t = -0.29$, $p = 0.77$) between women who gave birth before the COVID-19 outbreak and those who gave birth during the pandemic (abuse and violence: $M = 1.42$, $SD = 1.42$ vs. $M = 1.91$, $SD = 2.01$; non-consented care: $M = 0.62$, $SD = 0.59$ vs. $M = 0.61$, $SD = 0.59$; DASS-21: $M = 5.04$, $SD = 4.12$ vs. $M = 5.25$, $SD = 5.00$; IES-R: $M = 2.03$, $SD = 2.05$ vs. $M = 2.24$, $SD = 2.45$).

Thus, apart from age, time elapsed from childbirth and having given birth before or during the COVID-19 outbreak were not included in further regression models as covariates.

Sociodemographic factors associated with obstetric violence

Results of multiple linear regressions of socio-demographic characteristics on OV are reported in Table 4. All VIFs were acceptable, ranging from 0.07 to 1.59 in models tested.

In the first model, only type of childbirth was associated with abuse and violence. Specifically, having given birth naturally increased the likelihood of reporting higher levels of abuse and violence, explaining 5% of variance of this factor with a small effect size ($f^2 = 0.06$).

In the second model, however, educational level, type of childbirth and having participated in a prenatal childbirth preparedness course were associated with non-consented care. Specifically, lower educational level, having given birth naturally and not having participated in a prenatal childbirth preparedness course increased the likelihood of reporting higher levels of non-consented care. All variables together explained 9% of the variance of the non-consented care factor with a small effect size ($f^2 = 0.09$).

Associations between obstetric violence and mental health

Correlations between OV and mental health variables are reported in Table 5. Both OV factors correlated positively with psychological distress and with post-traumatic stress, indicating that OV is associated with high levels of mental health problems.

Table 5. Correlation between obstetric violence, psychological distress, and post-traumatic stress.

	1	2	3	4	*M*	*SD*	*Range*
1. Abuse and violence	1				1.82	1.92	0–8
2. Non-consented care	0.38***	1			0.61	0.59	0–6
3. DASS-21	0.44***	0.12*	1		15.61	14.49	0–63
4. IES-R	0.55***	0.16**	0.75***	1	16.41	17.35	0–88

Note. M = Mean; SD = Standard deviation.
*p < 0.05; **p < 0.01; ***p < 0.001.

Table 6. Regression of obstetric violence on mental health.

	DASS-21			IES-R		
	B(SE)	β	95% CI	B(SE)	β	95% CI
Step 1—Demographics						
Age	−0.16(0.05)	−0.28**	−0.27, 0.05	−0.05(0.02)	−0.19*	−0.10, −0.01
Education (≤high school)	0.13(0.58)	0.01	−1.02, 1.27	0.01(0.26)	0.01	−0.51, 0.53
Annual income	0.28(0.28)	0.06	−0.26, 0.83	0.03(0.13)	0.01	−0.22, 0.28
Partner (no)	−1.50(0.77)	−0.11*	−3.01, −0.01	−0.23(0.35)	−0.03	−0.92, 0.46
Childbirth (natural)	1.66(0.58)	0.16**	0.51, 2.79	0.90(0.27)	0.18**	0.37, 1.42
Prenatal childbirth preparedness course (no)	−0.07(0.54)	−0.01	−1.14, 1.01	0.25(0.25)	0.05	−0.23, 0.75
Parity (primiparous)	0.78(0.92)	0.08	−1.02, 2.59	−0.05(0.42)	−0.01	−0.88, 0.77
Facility (private)	0.50(0.61)	0.04	−0.69, 1.70	−0.07(0.28)	0.01	−0.61, 0.47
	$R^2 = 0.04$; $F = 2.51*$			$R^2 = 0.07$; $F = 2.44*$		
Step 2—Obstetric violence						
Abuse and violence	1.14(0.15)	0.45***	0.85, 1.43	0.70(0.07)	0.57***	0.57, 0.83
Non-consented care	0.16(0.49)	0.02	0.79, 1.12	0.14(0.22)	0.04	−0.29, 0.58
	$R^2 = 0.25$; $\Delta R^2 = 0.18$; $F = 9.10***$			$R^2 = 0.35$; $\Delta R^2 = 0.28$; $F = 14.71***$		

Note. B = Non-standardised regression coefficients; SE = Standard error; CI = Confidence intervals; β = Standardised regression coefficients; R^2 = R-square; ΔR^2 = R-square change.
*p < 0.05; **p < 0.01; ***p < 0.001.

The results of multiple linear regressions of OV on mental health are reported in Table 6. All VIFs were acceptable, ranging from 0.23 to 1.68 in models tested.

With respect to demographics, in the first model, being younger, not having a partner and having given birth by Caesarean-section were all associated with increased psychological distress, while in the second model, being younger and having given birth by Caesarean-section increased the likelihood of reporting higher levels of post-traumatic stress. However, these variables explained only 0.4% and 0.7% of the variance in mental health variables, respectively.

Introducing OV factors in step 2 explained 25% and 35% of variation in psychological distress and post-traumatic stress, respectively, with corresponding medium ($f^2 = 0.33$) and large ($f^2 = 0.54$) effect sizes. Nevertheless, such percentages concerned only the factor of abuse and violence, indicating that high levels of abuse and violence increased the likelihood of reporting negative mental health outcomes.

Discussion

This study aimed to explore types and incidence of events occurring during childbirth as perceived by a sample of Italian women as OV, along with associated socio-demographic factors and the effects of these events on mental health.

Just over two-thirds of the sample (66.4%) and more than half of participants (55.5%) admitted having experienced at least one type of abuse or non-consented

care, respectively. In total, more than three-quarters of the sample (78.4%) admitted to having experienced at least one type of OV. This percentage is similar to that found in a study of 17,541 Spanish women (74.3%; Mena-Tudela et al., 2020a). However, when our results are compared with those obtained by the only existing study (using different methods) assessing OV among Italian women (Ravaldi et al., 2018), participants reported higher rates of OV (55.5–66.4% vs. 21.1%). In both studies, the percentage of women undergoing episiotomy was almost the same (54.5% vs. 54.24%) with both percentages being much higher than the rate (10%) proposed by WHO (2018) as suggesting the presence of OV. The Italian National Institute of Health has reported that, in representative samples of women who gave birth in Italy, rates of episiotomy have reduced in recent years, from 69% in 2002 to 42% in 2011 (Lauria et al., 2018). This is consistent with findings from another Italian study, which reported that 34.4% of the sample ($N = 1,229$) giving birth between 2005 and 2008 underwent an episiotomy (Colaceci et al., 2020). Thus, the high rates of episiotomy found in our study may not be representative.

Regarding socio-demographic factors, the role of younger age as a risk factor for OV is in line with previous studies (Bohren et al., 2019; Castro & Frías, 2020; Mena-Tudela et al. 2020a; Perera et al. 2018). This finding may be explained by the mistreatment that some young women may experience because of judgements made by healthcare providers about their early engagement in sexual activities (Bohren et al., 2019) or by their inexperience with health systems and related lack of knowledge about what childbirth entails (Perera et al. 2018). The role of lower educational level as a risk factor for OV is in line with results obtained by Bohren et al. (2019), probably indicating that more economically and socially disadvantaged women are treated less respectfully than advantaged women due to a lack of health equity. Instead, participating in prenatal childbirth preparedness courses may represent a protective factor for women, as such courses seem to have a positive effect on the course of labour, delivery outcomes and rates of breastfeeding (Yohai et al., 2018), and this greater awareness may protect women from OV. The finding concerning the role of natural childbirth as a risk factor for abuse and violence is in line with the results obtained by Martínez-Galiano et al. (2020), which indicate that both scheduled and urgent Caesarean-sections are protective factors against verbal abuse. This may happen because the active participation of women giving birth naturally increases the stress experienced by health professionals, which in turn increases the likelihood of acting verbal abuse.

Finally, our findings confirm those of previous studies highlighting the detrimental role of OV on women's mental health (Hernández-Martínez et al., 2020; Reed et al., 2017; Silveira et al., 2019). This finding is in line with those showing that gender-based violence is associated with mental health problems (Jordan et al., 2010). However, of the two indicators of OV, only violence and abuse were associated with negative mental health outcomes. This suggests that coercion, physical mistreatment and/or verbal abuse have a greater traumatic impact than does non-consented care on women's mental health. Furthermore, it is noteworthy that being younger, not having a partner and having given birth by a Caesarean-section are significantly associated with negative mental health outcomes independently from abuse and violence, highlighting

that being older, being in a couple and giving birth naturally may represent protective factors for the wellbeing of pregnant women, in line with findings from previous studies (Bilszta et al., 2008; Dekel et al., 2019; Lockwood Estrin et al., 2019).

Limitations and future research

The results of this study should be read in the light of several limitations. First, the cross-sectional nature of the research does not allow conclusions to be drawn about the causality of the relationships investigated. Future studies could conform to a longitudinal research design in order to analyse the effects of OV on mental health in the long term, verifying the strength and consistency of the identified effects.

Second, the sample recruited was relatively small, is not representative of the Italian population of women who have given birth and was almost exclusively composed of Caucasian women. Future Italian studies should recruit more representative, larger and more diverse samples of women. Third, participants' age range (18–60 years) was very large and childbirth care and support has changed in recent years in Italy (Lauria et al., 2018). Although our analyses indicated that age did not predict OV, it would be interesting to analyse the role of age in greater detail in larger samples, assessing whether recent awareness of the concept of OV has changed individual perceptions of certain medical practices. Finally, both OV and negative mental health outcomes were measured through self-report questionnaires, which may mean that some findings may be over-represented because they were influenced by the subjective perceptions of participants.

Building on the findings of this study, future research might usefully explore the medical motivations behind certain practices that are perceived by women as violent or undignified, while physicians may have considered some of them as necessary to protect the person's life and that of the child. However, this is where the paradox lies: midwifes and obstetricians/gynaecologists are often unaware that the routinisation of invasive medical procedures is harmful and traumatic to women and newborns, leading to the normalisation of practices identified as manifestations of OV (Mena-Tudela et al. 2020b). This normalisation may thus be read as a sign of clinicians' unawareness, which is what makes OV a complex and systemic problem to be tackled beyond the level of the individual.

Implications for policy, practice and research

Despite its limitations, findings from this study have important implications for public health. Considering that OV is a multifaceted phenomenon, tackling it requires a multidimensional approach (Sadler et al., 2016). First, from a legislative point of view, beyond existing European recommendations, specific country-level legislation is needed to address OV. Currently, Italy lacks any such a law, and this contributes to making the problem invisible.

Second, at the organisational level, specific public funding could be allocated to provide training to midwifes, obstetricians/gynaecologists and the wider team working in reproductive health. There may also be value in clinical and health psychologists

providing support to midwifes and obstetricians/gynaecologists to help them to manage stress, resist emotional overload (Lauria et al., 2018) and make them aware that certain routine procedures (e.g. Kristeller manoeuvre) are harmful and traumatic to women and newborns.

Finally, beyond the points identified above, more research on this topic is needed, especially interdisciplinary, multicentric and cross-national studies, using robust methods and representative samples.

Conclusion

The prevalence of perceived OV in a group of Italian women recruited was high, especially among younger and less educated participants, those who had not attended a prenatal childbirth preparedness course, and those who gave birth naturally. Furthermore, it was found that experiencing abuse and violence during childbirth increased the likelihood of reporting later negative mental health outcomes. Although there are limitations concerning the sample and the research design, this study sheds light on the need to address OV from a multidimensional approach, incorporating legal, organisational and research perspectives.

Data availability statement

The data and materials that support the findings of this study are available from the corresponding author upon reasonable request.

Disclosure statement

No potential conflict of interest was reported by the authors.

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