Adherence to WHO recommendations for intrapartum care in Mexico: An observational study of 208 births in public and private clinical settings in nine States.

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Background: Mexico's Health Law provides a normative framework to regulate procedures of institutional maternal healthcare provision to ensure evidence-based quality care during pregnancy, birth and postpartum period to all women and their newborns. Despite a long established and comprehensive mandate, national and state level statistics on actual maternal health services coverage and utilization have only relatively recently become available, indicating modest but sustained progress over the last decade. Along with increased availability and access, tracking advances in quality of care is paramount to assessing the impact of public policy aimed at improving maternal and infant health outcomes and reducing health disparities. Nevertheless, systematic evaluation of the quality of maternal health care provision, particularly during childbirth in healthcare facilities is scarce, with those incorporating women-centered outcomes almost non-existent. The scant available evidence limited to only a handful of states in the country suggest very low rates of compliance with WHO and official norms guidelines.

Aims: To document the WHO recommended practices for intrapartum care in a convenience sample of 22 public and private health facilities in nine Mexican states. Compare prevalent practices in public and private settings.

Methods: Direct observation of 208 births was conducted by 16 independent trainees who participated as doulas with the birthing women's informed consent. After the birth, observations were filed in relation to health facilities characteristics, labour onset, practices and interventions during labour and birth, newborn care, effective communication, respectful and dignified care, informed choice and women's assessment of quality of care. Sample descriptives and prevalence rates for each indicator were calculated and categorized into colour-coded quartiles according to degree of compliance with WHO recommendations. (Q1-red- lowest compliance; Q2-orange-Q3-yellow,Q4-green-highest compliance).

Results: A total of 208 births 81% (n=168) in public and 19% (n=40) in private health facilities were observed. One third of were recorded in Mexico City and 2/3 in the remaining 8 States; 67% of births occurred in maternity clinics and 32% in general hospitals. All births were singletons, 94% full term. Participant women were aged 14-40 years old, 53% were primiparous and only 25% engaged in paid work. All births bar one resulted in live births; no negative maternal outcomes were reported. Women's sociodemographic data, facilities' characteristics (Table 1 & 2) and intrapartum care indicators (Tables 3-6) differ between private and public clinics; table 7 shows women's perspectives of quality of care.

TABLE 1. DESCRIPTIVE SAMPLE

	PRIVATE (% of private births)	PUBLIC (% of public births)	TOTAL (% of all births)
Institutions			
	19	81	
n	*40*	*168*	*208*
Age group			
under 17 yrs	5	10	9
18-20 yrs	0	23	18
21-30 yrs	47	50	50
31-40 yrs	47	16.5	22
Occupation			
Student	5	2	3
Unpaid work (home maker/carer)	45	89	76
Paid work (employed/selfemployed)	50	14	21
Parity			
Primiparous	41	47	48
Multiparous	59	53	52
Estimated pregnancy weeks since last menses			
Preterm <37 wks	6	6.5	6
Full term >37 wks	94	93	94

TABLE 2.CONDITIONS IN HEALTH FACILITY

	PRIVATE (% of private births)	PUBLIC (% of public births)
Type of accomodation		
shared room (up to 8 beds in a room)	0	73
private room (single bed)	100	27
Facilities in health facility		
UCI	83	66
Newborn nursery	78	48
Mandatory Rooming-in	25	92
Ammenities		
WC available	95	50
Shower available	75	30
Bathtub	15	4
Lighting		
Natural	63	5
Artificial	30	95
Poor	5	0.5
Ventilation		
Good	83	72
Poor	18	26
Temperature		
High (hot)	15	10
Comfortable	83	80
Low (cold)	3	10
Noise level		
Acceptable	98	71
Uncomfortable	2	35
Space for woman to walk		
Enough space to walk freely	85	67
Restricted; only around the bed	13	31
No space to walk	0	2

TABLE 4. PRACTICES AND INTERVENTIONS DURING LABOUR AND BIRTH

	PRIVATE (% of private births)	PUBLIC (% of public births)
Woman were allowed to walk during labour	95	64
Woman walked during labour	85	41
Intravenous line, foetal monitor or other instruments limited the woman's movement	20	53
Woman was able to choose labouring position	90	85
Labouring position(s) chosen by woman		
Lithotomy (supine decubitus)	18	45
Lying on side (lateral decubitus)	58	86
Sitting	80	67
Standing	78	46
Sqwatting	53	26
Four points	53	26
Kneeling	23	16
Woman was offered food during labour	82	45
Woman could not choose her birthing position; had to stay sitting or lying on bed	56	95
Health facility allows women to have a person to accompany her	98	48
Woman was accompanied by a person of her choice during labour	95	19
Woman was accompanied by a person of her choice during birth	95	7
Woman had no interventions during labour	40	12
Types of 'routine' interventions		
Preparatory catheterizaton	18	23
Continous foetal monitoring	23	39
Enema	3	5
Trichotomy	3	21
Compressive bandaging for legs	13	24
Bladder emptying probe	10	17
Amniotomy	23	35
Vaginal examination	50	51
Number of vaginal examinations during labour		
1 to 3	25	7
4 to 8	23	38
more than 8	5	6
None	50	49
Types of interventions during labour and birth		
Epidural anesthesia not related to C-section	28	26
Manual fundal pressure (Kristeller)	3	8
Manual cervical dilation	3	19
Manual perineal dilation	10	26
Episiotomy	8	26
Directed pushing	28	55
Forceps	0	1
Uterine cavity manual examination	8	31
Mode of birth		
Vaginal with no interventions	35	29
Vaginal with interventions	35	49
Emergency C-section	30	20
VBAC	0	2
Most common reasons given by medical personnel for performing c-section- All births		
Prolonged labour		
Foetal distress		
Eclampsia		
Abnormal foetal position		
Woman was consulted to perform C-section	92	54
Informed consent was obtained from woman before performing C-section	92	67
Woman's arms were tied during c-section	13	17

TABLE 5. CARE OF THE NEWBORN

	PRIVATE (% of private births)	PUBLIC (% of public births)
Timing of clamping umbilical cord after birth		
Late (1-3 min after birth)	60	20
Skin to skin contact after birth		
Baby was placed with mother immediately or within first hour after birth	90	78
Baby was put to breast after birth		
Within first hour after birth	89	74
Delivery of the placenta		
Active management	53	79
Rooming in while in hospital		
Baby stayed with mother at all times	83	82
Baby was given formula during hospital stay	18	31
Mother was consulted before giving baby formula	100	34
Feeding mode at time of postpartum visit (morning after birth)		
Exclusive breastmilk	83	70
Breastmilk and formula	15	18
Formula	0	7

TABLE 6. EFFECTIVE COMMUNICATION AND RESPECTFUL CARE (According to observer's perception)

	PRIVATE (% of private births)	PUBLIC (% of public births)
Women were generally consulted before interventions	84	32
Women were generally treated with respect	90	42
Women were asked for informed consent	90	56
When students/trainees were present, were women asked for their consent	66	20
Medical staff called the woman by her name	95	70
Medical staff asked whether women had any questions/concerns	95	35
Medical staff informed woman about her progress	93	61
Medical staff treated women empathetic	83	42
Woman was treated in a considerate way by medical staff	78	53
Woman was not treated indiferently	92	53
Woman was treated without agression	97	89
Woman was treated without contempt	95	90
Woman was not discriminated	97	96
Woman's experience was free of violence	92	64
The type of violence experienced was:		
physical violence	33	33
physical and verbal violence	0	7
psychological and emotional violence	66	47
verbal violence (insults, humiliations)	0	13

TABLE 3. LABOUR ONSET

	TOTAL (% of all births)
Most common reason for attending hospital on day of birth? % of all births	
Signs with spontaneous onset of labour	79
Contractions	52
Mucus expulsion	24
Colic	19
Membranes ruptures	16
Light bleeding	12
Pain or malaise related to pregnancy	8
Scheduled appointment	7
Place where contractions started- % of all births	
Hospital	43
Street	1
Home	53
Labour phase on arrival to hospital- % of all births	
Latent phase (0- 6cm) dilation	71
Active phase (6-8 cm) dilaton	21
Transition phase (8-10 cm) dilation	6
Expulsion phase	0.5
What happened when woman arrived in hospital- % of all births	
Woman not admitted to hospital, asked to come back later	11.5
Woman had to wait a considerable time (> 1h) before being admitted	6
Woman admitted to hospital and guided to labour/expulsion room	81

TABLE 7. WOMAN'S PERSPECTOVE OF QUALITY OF INTRAPARTUM CARE

	PRIVATE (% of private births)	PUBLIC (% of public births)
General experience		
positive/satisfactory	95	87
Care by health providers		
satisfactory	100	83
Medical attention received		
satisfactory	100	89
Health facilities		
positive	95	91
Woman's expectations were met	75	35

Take home messages

- Differences in sociodemographic characteristics of users of private and public health facilities are evident: women in public clinics are younger, less likely to be in paid employment, their age at first birth is younger, parity and rates of adolescent pregnancies higher. No apparent higher risk of prematurity is observed.
- In the health facilities surveyed, adherence to WHO recommendations tends to be better in private compared to public clinics.
- Women's satisfaction with the quality of intrapartum care is higher in private vs public users.
- Observers' perceptions about the quality of care received by women in public facilities often contrast with women's own assessment; women tend to rate their experience comparatively higher and more satisfactory. Nevertheless, public healthcare users are half as likely to report that their expectations for care during birth were met compared to women in private health facilities.

Strengths and limitations

Relatively small sample, unbalanced, not randomly collected and not representative of the range of public and private institutions that provide maternity services in the country. Nevertheless, this observational study provides an independent snapshot of the current situation and provides the basis for future more representative studies.

Conclusion: Overall, the preliminary analyses of certain practices and routinary interventions show signs of favourable change, likely the result of integrated efforts at the local and structural levels. Nevertheless, there remain areas such as communication and respectful care where further work is needed to ensure a positive childbirth experience to all women, particularly in public facilities.

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