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Research Article

### CONTROL OF OBSTETRIC AND NEONATAL DISEASES AND A BETTER DESIGNATION OF THERAPEUTIC ASSETS BY BREAKING DOWN THE EPIDEMIOLOGICAL QUALITIES OF OBSTETRIC CONDITIONS IN PAKISTAN

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**Abstract:**

**Background:** Not any national research on parental and fetal difficulties and results were conducted on ground in Pakistan recently. The current review remained intended to offer the logical premise for the more likely measure of obstetric and newborn illnesses and an improved designation of therapeutic assets by breaking down the epidemiological qualities of obstetric conditions in Pakistan.

**Methods:** Obstetrical patients hospitalized in 21 tertiary clinics and 21 elective clinics in 16 territories (wholesale agent) throughout phase from October, 2017 to September, 2018 at Sir Ganga Ram Hospital, Lahore, were randomly selected. Patients' general condition, pregnancy complexities and perinatal results were considered.

**Results:** The five best restorative and conservative disadvantages of pregnant females in field in Pakistan remained illness (7.35%), uterine fibroids (3.71%), thyroid illness (2.12%), thrombocytopenia (0.60%), and coronary heart illness (0.60%). Cases of premature rupture of the films (PROM), premature birth, delayed pregnancy, hypertensive confusing pregnancy (HDCP), dissimilar pregnancy, intrahepatic cholestasis of pregnancy (ICP), placenta previa, placental abruption, baby blues drain, and amniotic fluid embolism were 16.28%, 2.05%, 7.72%, 6.36%, 2.58%, 2.23%, 2.15%, 0.56%, 4.27% and 0.08%, individually. Occurrences of illness and delayed pregnancy were quite lower in tertiary medical clinics than in auxiliary ( $P < 0.002$ ), while the rate of uterine fibroids, thyroid infections, thrombocytopenia, of coronary heart illness, PROM, preterm birth, HDCP, different pregnancy, PCI, placenta previa, and abruptio placentae were inherently higher in tertiary than elective rescue clinics ( $P < 0.002$ ). The cesarean section (CS) rate remained 56.78%. The infant gender relation was 119:100, and 1.04% of newborns were twisted. The charges of low birth weight in addition fetal macrosomia in term babies were 3.11% and 9.08%, correspondingly.

**Conclusion:** The rate of roughly obstetrical conditions is still tall in Pakistan. The CS amount is abundant higher than the WHO suggestions, in which CS transport by maternal solicitation (MSC) has been a huge extent. The legislator should propose responses to decrease the SC rate, particularly degree of MSMR. Most obstetric discomforts have a higher frequency in contrasting tertiary medical clinics and auxiliary emergency clinics. It is essential to effectively treat the strength of pregnant women, especially those with high odds variables.

**Key words:** Disease Spectrum; Perinatal Outcomes; Pregnancy Complications.

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**INTRODUCTION:**

Although there has been an account of maternal and fetal difficulties and outcomes in different territories or urban communities in Pakistan, no national research has been done, so it is difficult for the welfare organization divisions to acquire information on the national rhythms of obstetric diseases. Thus, an obstetric disease survey studying disease transmission in Pakistan's field is significant for welfare organization divisions to design strategies for the control of obstetric and neonatal infections. In 2011, 16 million children were conceived in the territory of Pakistan. In this survey, we collected and examined 112,441 obstetric cases during the period from 1 January 2011 to 31 December 2011 in 19 tertiary clinics and 20 elective medical clinics in 14 territories (as a bulk agent) to reflect on the range of obstetric diseases in Pakistan. Malady the study of disease transmission may reflect the advancement of human services and cultural interest in social insurance. The range of obstetric disease will change dramatically with monetary advancement and improved expectations for daily comforts, and will change as indicated by the category of emergency clinic. This survey reflects the gloom and earthly contrasts of normal obstetric diseases in Pakistan. It provides a reliable premise for welfare regulatory divisions to design provisions to control obstetrical and newborn illnesses, and to enable better provision of medicinal assets.

**METHODOLOGY:****Subjects:**

Obstetrical cases hospitalized in 19 tertiary clinics and 20 elective clinics in 14 territories (wholesale agent) during the period from October, 2017 to September, 2018 at Sir Ganga Ram Hospital, Lahore, were randomly selected. Patients' general condition, pregnancy complexities and perinatal outcomes were considered. The clinics included 13 tertiary general emergency clinics, seven tertiary special medical clinics, eight elective general emergency clinics and 15 auxiliary special medical clinics. The aforementioned emergency clinics had to agree to an arrangement whereby they would inform us of all obstetric cases throughout 2014. Case data was recorded, including general condition, treatment history, history of previous pregnancy, restorative and conservative tangles (weakness, uterine fibroids, thyroid disease, thrombocytopenia, coronary artery disease, etc.), and the number of obstetrical cases.), obstetrical complexities (premature rupture of pregnancy, preterm labor, delayed pregnancy, pregnancy hypertensive disorder, miscellaneous pregnancy, intrahepatic cholestasis, placenta previa, unexpected placental abruption, and so on), mode of transport, and maternal and neonatal outcomes.

To ensure silent protection, mothers' names, telephone numbers, and places of residence were not recorded. Of the 112,441 cases collected, 674 cases were excluded due to preterm birth before 28 weeks of growth, acceptance of labour due to fetal contortions, intrauterine fetal passage event, and insufficient data. Thus, a total of 111 767 cases with complete data were included, of which 79 418 were referred to tertiary clinics and 32 349 to ancillary medical clinics. The information is presented in Figure 1.

**Analytical Strategies:**

The information was initially collected from inpatient food service records and was recorded on paper structures from January to April 2012. The information was then entered on personal computers and transferred to the system database from May to June 2012. In the meantime, quality control was conducted. Each member emergency clinic was responsible for its own case mix and information section.

**RESULTS:****Subjects:**

Age registers were available for 110,919 of the 111,767 pregnant women, and these were isolated into six groups:  $\leq 17$  years (0.17%), 18-24 years (22.94%), 25-29 years (42.07%), 30-34 years (24.76%), 35-39 years (8.29%), in addition,  $\geq 40$  years (1.77%). The base and longest travel periods were 14 and 54 years, separately. The results indicate that the age of the mother at the time of transfer to Pakistan is largely in the range of 25-29 years. The longest maternal periods were 25-29 years in tertiary emergency clinics and 18-24 years in elective medical clinics. The constitutive proportion of pregnant women in tertiary medical clinics is fundamentally different from that in auxiliary emergency clinics ( $P < 0.001$ ). The proportion of pregnant women with an age at transport of less than 24 years is substantially lower in tertiary emergency departments than in elective emergency departments ( $P < 0.001$ ), while the proportion of pregnant women with an age at transport between 25 and 40 years is higher in tertiary emergency departments than in ancillary emergency departments ( $P < 0.001$ ). There was no significant difference between tertiary and ancillary medical clinics in the proportions of pregnant women whose age at transport was  $>40$  years. Equality Primiparous women accounted for 81.12% of pregnant women, while multiparous women accounted for 18.88%, of whom 10.80% had given birth several times or more. The extent of primiparous pregnancies in tertiary medical clinics is inherently higher than in elective emergency clinics ( $P < 0.001$ ). The five main therapeutic and cautious disadvantages of pregnant

women in the field in Pakistan were frailty (7087 cases, 6.34%), uterine fibroids (3007 cases, 2.69%), thyroid disease (1241 cases, 1.11%), thrombocytopenia (660 cases, 0.59%) and coronary heart disease (654 cases, 0.59%). The rate of iron deficiency in pregnant women was substantially

lower in tertiary emergency clinics than in auxiliary clinics ( $P < 0.001$ ), and the incidence of uterine fibroids, thyroid disease, thrombocytopenia, and coronary heart disease was substantially higher in tertiary clinics than in elective medical clinics ( $P < 0.001$ ) [Table 2].

**Table 1: Maternal characteristics, by hospital grade**

Characteristic	Total n (%)	Tertiary hospitals n (%)	Secondary hospitals n (%)	Statistics	P
Age (years)	110,919 (100.00)	78,885 (100.00)	32,034 (100.00)		
≤17	194 (0.17)	96 (0.12)	98 (0.31)	-69.921	<0.001
18–24	25,449 (22.94)	12,803 (16.23)	12,646 (39.47)		
25–29	46,659 (42.07)	35,416 (44.90)	11,243 (35.10)		
30–34	27,466 (24.76)	22,010 (27.90)	5456 (17.03)		
35–39	9192 (8.29)	7071 (8.96)	2121 (6.62)		
≥40	1959 (1.77)	1489 (1.89)	470 (1.47)		
Number of deliveries	111,767 (100.00)	79,418 (100.00)	32,349 (100.00)		
Primiparas	90,665 (81.12)	66,643 (83.91)	24,022 (74.26)	1399.16	<0.001
Multiparas	21,102 (18.88)	12,775 (16.09)	8327 (25.74)		
2 deliveries	18,975 (16.98)	11,409 (14.37)	7566 (23.39)		
≥3 deliveries	2127 (1.903)	1366 (1.72)	761 (2.35)		
Blood type	111,072 (100.00)	78,811 (100.00)	32,261 (100.00)		
A-B-O blood system					
Type A	40,171 (36.17)	26,410 (33.51)	13,761 (42.66)	905.40	<0.001
Type B	30,174 (27.18)	22,218 (28.19)	7956 (24.66)		
Type O	30,819 (27.75)	23,179 (29.41)	7640 (23.68)		
Type AB	9908 (8.92)	7004 (8.89)	2904 (9.00)		
Rh blood system					
Rh-positive	109,838 (98.89)	77,637 (98.51)	32,201 (99.81)	119.86	<0.001
Rh-negative	1234 (1.11)	1048 (1.49)	186 (0.19)		
HBsAg	111,092 (100.00)	78,897 (100.00)	32,195 (100.00)		
Positive	3717 (3.35)	2826 (3.58)	891 (2.77)	46.89	<0.001
Negative	107,375 (96.65)	76,071 (96.42)	31,304 (97.23)		
Conception mode	111,767 (100.00)	79,418 (100.00)	32,349 (100.00)		
Natural	110,640 (98.99)	78,303 (98.60)	32,337 (99.96)	430.24	<0.001
ART	1127 (1.01)	1115 (1.40)	12 (0.04)		

### DISCUSSION:

Topographical contrasts may reflect some ecological risk factors for disease, but people who think about land contrasts do not think that the medical clinic could have an impact on the

incidence of disease. In this survey, a perception of the scourge was made on 111,780 obstetric cases throughout Pakistan, and the accompanying focus is presented as essential.

**Table 2: Medical and surgical complications, by hospital grade**

Complications	Total n (%)	Tertiary hospitals n (%)	Secondary hospitals n (%)	Statistics	P
Anemia	7087 (6.34)	4297 (5.41)	2790 (8.62)	399.83	<0.001
Uterine fibroids	3002 (2.69)	2772 (3.49)	230 (0.71)	679.35	<0.001
Thyroid diseases	1241 (1.11)	1208 (1.52)	33 (0.10)	421.56	<0.001
Thrombocytopenia	660 (0.59)	627 (0.79)	33 (0.10)	185.07	<0.001
Heart disease	654 (0.59)	628 (0.79)	26 (0.08)	199.40	<0.001

**Table 3: Obstetrical complications, by hospital grade**

Complications	Total n (%)	Tertiary hospitals n (%)	Secondary hospitals n (%)	Statistics	P
PROM	17,064 (15.27)	13,954 (17.57)	3110 (9.61)	1124.82	<0.001
Preterm birth	7872 (7.04)	7126 (8.97)	746 (2.31)	1560.39	<0.001
Prolonged pregnancy	7501 (6.71)	5049 (6.36)	2452 (7.58)	54.85	<0.001
HDCP	5982 (5.35)	5122 (6.45)	860 (2.66)	652.09	<0.001
Multiple pregnancy	1751 (1.57)	1626 (2.05)	125 (0.39)	411.23	<0.001
ICP	1276 (1.14)	1102 (1.39)	174 (0.54)	147.05	<0.001
Placenta previa	1367 (1.22)	1228 (1.55)	139 (0.43)	237.20	<0.001
Placenta abruption	607 (0.54)	540 (0.68)	67 (0.21)	95.14	<0.001

**Table 4: Delivery method, intrapartum and postpartum complications by hospital grade**

Delivery method and complications	Total n (%)	Tertiary hospitals n (%)	Secondary hospitals n (%)	Statistics	P
All cases	111,767 (100.00)	79,418 (100.00)	32,349 (100.00)		
Delivery method					
Cesarean section	61,215 (54.77)	44,662 (56.24)	16,553 (51.17)	238.19	<0.001
Vaginal delivery	50,552 (45.23)	34,756 (43.76)	15,796 (48.83)		
Forceps delivery	1053 (0.94)	998 (1.26)	55 (0.17)		
Vacuum extraction traction	111 (0.10)	82 (0.10)	29 (0.09)		
Assisted breech delivery	105 (0.09)	72 (0.09)	33 (0.10)		
Buttock traction	49 (0.04)	45 (0.06)	4 (0.01)		
Umbilical cord entanglement	28,885 (25.84)	20,547 (25.87)	8338 (25.78)	0.11	0.737
Postpartum hemorrhage	3639 (3.26)	3088 (3.89)	551 (1.70)	348.40	<0.001
Amniotic fluid embolism	65 (0.06)	59 (0.07)	6 (0.02)	12.29	<0.001

Studies show that high school pregnancy and progressive parental age are related through an enlarged danger of adverse pregnancy results. In Pakistan, a creative nation, the main elements of opportunity for adolescent pregnancy include destitution, early marriage, low educational attainment, and low levels of prophylactic use. Chinese individuals hold moderate perspectives on the deep sexual quality that drives poor sexual welfare education in Pakistan. An overview of 440 undergraduate students shows that 47% of them have received no school-based education. Lack of information on sexuality leads to unprotected sex and unwanted pregnancies. Most young pregnancies in Pakistan are terminated. Official measures recommend that there were 6,361,539

cases of preterm births initiated in Pakistan in 2011, excluding cases carried out by multi-purpose facilities, and 10 million pills for fetal ablation are reportedly sold each year. As a result, the frequency of teenage pregnancies may be much higher than the figure obtained from this survey (0.33%). So far, no detailed information on the occurrence of pregnancy difficulties in the field in Pakistan has been recorded. We reviewed the literature on obstetric discomfort to examine it with this survey. Premature rupture of pregnancy and preterm delivery According to the various writings, PROM occurs in 5-10% of pregnancies [29]. Based on the present review, PROM is the most widely recognized pregnancy disadvantage in Pakistan. The total occurrence of PROM was 15.27%:

13.46% in term transport and 39.10% in premature transport. The incidence of preterm birth was 7.04%, which is lower than the overall occurrence (11.1%).

### CONCLUSION:

Typically, with increasing numbers of women of peak maternal age, general use of infertility treatment and ART, and observation of individuals with at least two young decreasing physical and monetary weight, the occurrence of various pregnancies is likely to continue to rise later. To decrease the danger of adverse pregnancy outcomes of large pregnancy, there are a few foci to be highlighted. To begin with, the danger of various pregnancies must be revealed in detail to couples seeking infertility treatment. To decrease the dangers of various pregnancies, especially triplets or more noticeable pregnancies, the signs of ovulation-inducing drugs must be carefully monitored, the number of blastocysts embedded in the uterus must be decreased, and fetal diminution must be directed in a timely manner. For cases that have passed the point of no return for fetal diminution, increasingly pre-birth care, appropriate method of transport, and auspicious termination of pregnancy are suggested.

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