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Research Article

HIGH PREVALENCE OF STILLBIRTHS AND ITS ASSOCIATED DEMOGRAPHIC TRAITS

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Abstract:

Objective: There is very high rate of stillbirths in country Pakistan as compared to the whole world. So, this case work aimed to find out the occurrence of the stillbirths & its related traits of demography in Lahore. The objective of this case work is to know about the rate of the stillbirths with focusing on parity as well as pregnancy duration in a health care center of Lahore as well as to find out the social and demographic traits of the families suffering from this issue.

Methods: All females with pregnancy who delivered stillbirth outcome in the maternity ward of Allama Iqbal Medical Hospital Lahore were the part of this case work. This case work started in November 2017 & finished in October 2018. The deliveries which took place before twenty eight weeks of the pregnancy period were not the part of this case work. The records of the hospital as well as doctors confirmed the pregnancy duration. A well-organized Performa was in use for the collection of the concern information.

Results: Among total seven thousand seven hundred and eight deliveries, one hundred and thirty seven were deliveries were stillbirths. Total eighty four mothers were prim-parous & 12.0% females were less than twenty year of age. Most of the stillbirths as 80.30% were of macerated & 20.0% deliveries were just the fresh stillbirths. About 55.0% stillbirths took place from 33 to 37 weeks of pregnancy and 20.0% took place from 28 to 32 weeks of pregnancy period. Almost 80.0% (n: 109) stillbirths were less weight at the time of birth & only 20.0% (n: 28) stillbirths were available with normal weight at the time of birth.

Conclusion: The findings of this case work conclude that stillbirths are very frequent among females who were prim-parous. There is need of special awareness lectures and workshops for the care during pregnancy period in prim-parous females to decrease the occurrence of stillbirths.

KEY WORDS: Stillbirths, Prim-parous, occurrence, rate, methodology, frequent, pregnancy.

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INTRODUCTION:

Greater than 4 million neonates die in the whole world and there is an improvement in the survival rate from last twenty years [1]. World health organization has concluded the stillbirth as the 5th most important reason of mortality globally and denote the most frequent avoidable devastating outcome of pregnancy [2]. The frequency of stillbirths is very high in countries which are under development and rate of this issue is much less in the modern world [1-4]. In modern countries, majority of stillbirths are the result of dysfunction of placenta during delivery or some other not known reasons [3, 5]. Obesity in mothers & smoking are very important risk factors in addition with prim-parity [5-7]. In the developed nations, the danger of the stillbirths in prim-parous mothers of old age is much high in comparison with mothers of young age [1, 3, 5, 7]. The rate of stillbirths in majority of the modern countries is lower than five per thousand births while its range is from twenty to forty per thousand births in the countries which are under development [6-8]. The rate of stillbirth in the countries with low income is 10 times greater than the modern countries of the world [9].

In the whole world, 2.70 million stillbirths happen every year, 2/3rd of this complication occur in only South Asia & Africa and 55.0% stillbirths are taking place in the non-urban areas of our country Pakistan [3, 8, 10-12]. Worldwide, among four million deaths of neonates which happen each year, 98.0% mortalities occur in the countries with adverse resources [3, 10-12]. There was not much importance to the matter of stillbirths worldwide [1, 3, 5]. In our country, Pakistan, the range of the stillbirths is 36 to 98 per thousand deliveries [8, 10, 11]. There are five main risk factors of this complication as infection in mothers during pregnancy period, abnormalities among mothers as diabetes, complications during delivery, restriction in the development of fetal & congenital anomalies [1, 5-9, 12, 13]. In our country Pakistan, about 2/3rd deliveries occur at home & greater than 62.0% are the outcome of untrained attendants [14, 15]. Majority of the case works are about the mortalities of mothers and neonates but not about the stillbirths [16]. From last few years there is an increase in the rate of deliveries in hospital [17-19].

METHODOLOGY:

It took one year to complete the collection of information. All the females with pregnancy gave written consent to participate in the case work. Participants have the opportunity to leave the study whenever they want. Ethical committee of the hospital gave the permission to conduct this case work. There were total one hundred and thirty seven stillbirths in the maternity department of the hospital. Females with at least 3 antenatal checkups & faced by the doctor on duty were the part of this case work. According to this case work, stillbirth was the death of fetal after twenty eight weeks of pregnancy and with no symptoms of life [2]. Macerated and fresh still birth were the categorization of this abnormality [2, 9].

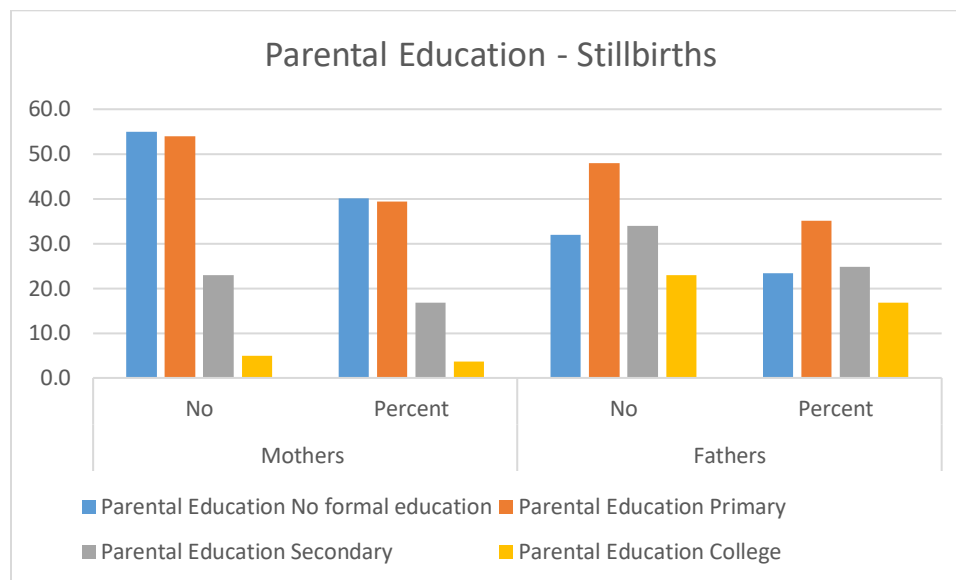
The categorization of the stillbirths carried out on the basis of pregnancy duration as term greater than thirty seven week, late preterm with greater than 32 weeks to 37 weeks & early preterm with greater than 28 weeks to 32 weeks of pregnancy. The categorization of the weight at the time of the births of stillbirths carried out as normal weight at the time of birth with greater than 2.50 kg, low birth weight with less than 2.50 and up to 1.50 kg, very low birth weight with less than 1.50 kg to 1 kg & extreme low birth weight with less than one kilogram. In current case work, the categorization of the mothers carried out in 3 groups of ages as less than twenty year of age, twenty to thirty five year of age & greater than thirty five year of age. We also carried out the classification of mothers in accordance with parity. We used a well-organized Performa for the collection of the social and demographic traits of the subjects of this case work as level of education, income of the family and profession. We also record the data about the age of mother, her parity, pregnancy duration & previous pregnancy outcome. Most of the data gathered from the files of those mothers. Females with less than twenty eight week of pregnancy duration were not the part of this case work.

RESULTS:

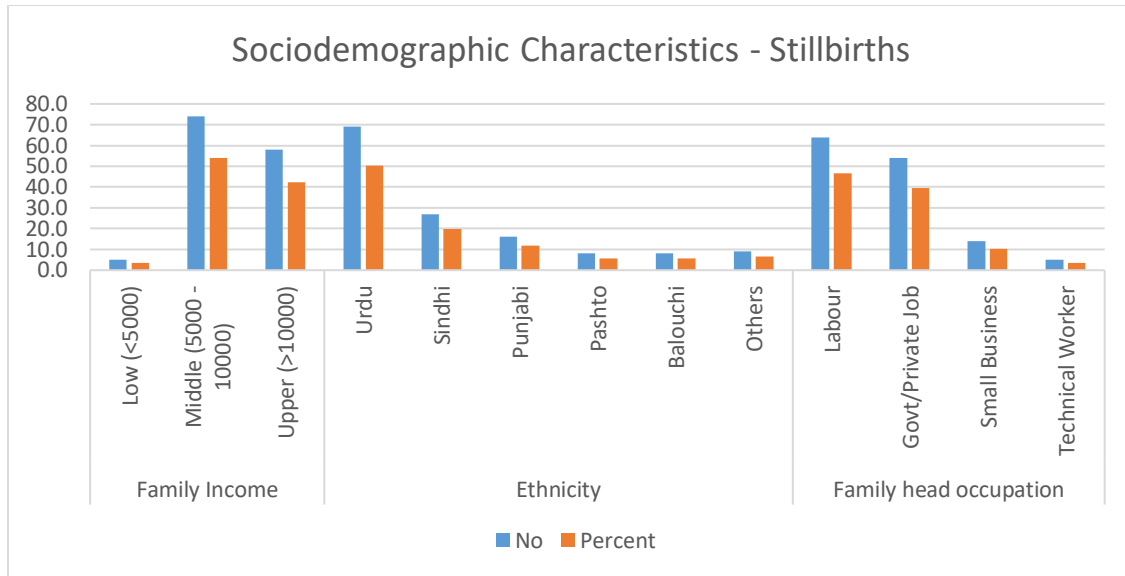
There were total one hundred and thirty seven stillbirths. The social and demographic traits of all these females with stillbirths are available in Tables-I & II.

Table-I: Parental Education associated with stillbirths (n=137).

Characteristics		Mothers		Fathers	
		No	Percent	No	Percent
Parental Education	No formal education	55.0	40.14	32.0	23.36
	Primary	54.0	39.42	48.0	35.03
	Secondary	23.0	16.80	34.0	24.82
	College	5.0	3.60	23.0	16.79

**Table II: Sociodemographic characteristics associated with stillbirths**

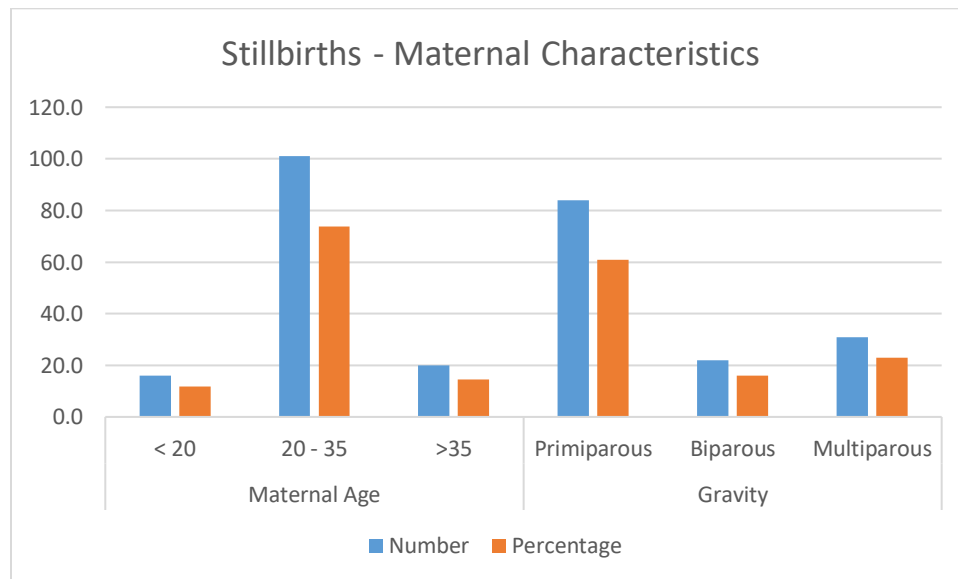
Characteristics		No	Percent
Family Income	Low (<5000)	5.0	3.60
	Middle (5000 - 10000)	74.0	54.00
	Upper (>10000)	58.0	42.30
Ethnicity	Urdu	69.0	50.40
	Sindhi	27.0	19.70
	Punjabi	16.0	11.70
	Pashto	8.0	5.80
	Balouchi	8.0	5.80
	Others	9.0	6.60
Family head occupation	Labour	64.0	46.72
	Govt/Private Job	54.0	39.41
	Small Business	14.0	10.21
	Technical Worker	5.0	3.65



There was no gender disparity in the stillbirths. About 58.0% families have the monthly income of less than ten thousand rupees and majority of the families were laborers. About forty percent mothers were illiterate. Eighty four (61.0%) mothers were prim-parous, twenty two (16.0%) mothers were multi-parous & thirty one (23.0%) mothers were bi-parous as mentioned in Table-III.

Table-III: Maternal characteristics associated with Stillbirths (n=137).

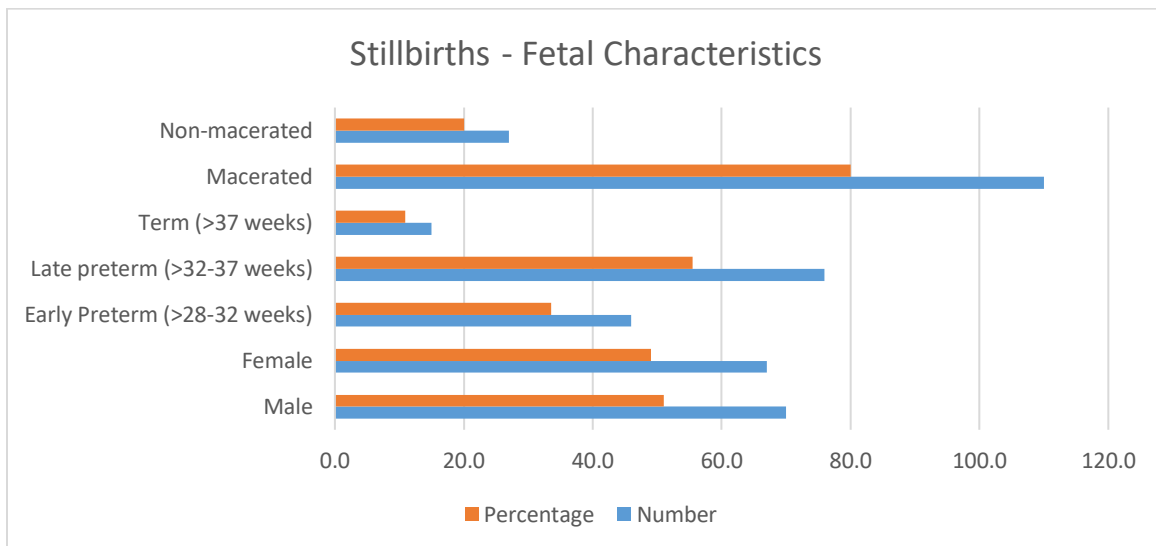
Characteristics		Number	Percentage
Maternal Age	< 20	16.0	11.68
	20 - 35	101.0	73.72
	>35	20.0	14.60
Gravity	Primiparous	84.0	61.00
	Biparous	22.0	16.00
	Multiparous	31.0	23.00



One hundred and one (74.720%) mothers were available in the age group of twenty to thirty five year of age, twenty (15.0%) mothers were with more than thirty five year of age & sixteen (11.7%) mothers had lower than twenty year of age. Fetal physiognomies linked with the stillbirths are present in Table-IV.

Table-IV: Fetal characteristics associated with stillbirths (n=137).

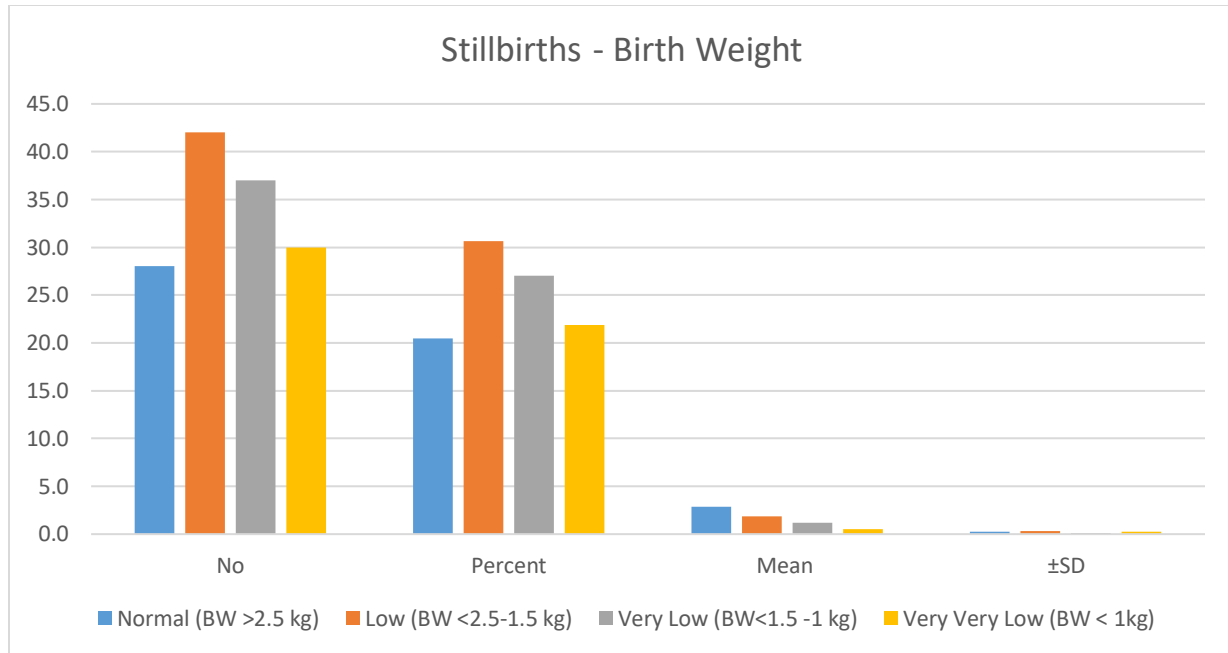
Characteristics		Number	Percentage
Gender	Male	70.0	51.00
	Female	67.0	49.00
Gestational age	Early Preterm (>28-32 weeks)	46.0	33.58
	Late preterm (>32-37 weeks)	76.0	55.47
	Term (>37 weeks)	15.0	10.95
Type of stillbirths	Macerated	110.0	80.00
	Non-macerated	27.0	20.00



About eighty percent stillbirths were available with low weight at the time of birth & only 20.0% stillbirths were with normal weight at the time of birth as mentioned in Table-V.

Table V: Birth weight categories

Birth weight (BW)	No	Percent	Mean	±SD	Range
Normal (BW >2.5 kg)	28.0	20.44	2.89	0.25	2.50 - 3.30
Low (BW <2.5-1.5 kg)	42.0	30.66	1.87	0.34	1.50 - 2.40
Very Low (BW <1.5 -1 kg)	37.0	27.00	1.16	0.14	1.00 - 1.40
Very Very Low (BW < 1kg)	30.0	21.90	0.52	0.25	0.10 - 0.90



DISCUSSION:

There is very high rate of stillbirths in our country Pakistan as compared to the whole world [19]. The rate mentioned by this case work is much less than the already available data present in our country [6, 18]. Due to the large amount of deliveries in hospitals, this rate of stillbirths is decreasing [17, 20]. There are high frequencies of this complication in the countries which are under development as Nepal, India & Pakistan [8, 13, 15, 21-23]. A recent case work showed a rate of stillbirths in Pakistan as 56.50 per thousand births [18]. The reason of this high rate is deliveries at home in non-urban areas of the country. Most of the females who delivered stillbirths were in the age group of twenty to thirty four year of age which are similar findings as compared to various other countries [8, 11, 14, 19, 23]. Stillbirth rate was high in old mothers in the modern world [1, 7, 9].

Prim-parous mothers are available with high danger of issue of stillbirth [5-8, 14, 17]. The low rate of this complication was available in many countries which are under development [1, 5, 7, 24]. The finding of this case work about term, preterm deliveries are similar with many other case works [1, 5, 14, 18]. Our case work showed very high rate of macerated stillbirth (80.0%) much high as compared to past case work in Pakistan [8, 18, 21]. Poverty is the main cause of this high rate of complication in many countries which are under development. Same factor was the main reason of stillbirths in various case works [16, 19, 21].

CONCLUSION:

The results of this case work showed that stillbirths are very frequent among prim-parous females. There is a need of awareness programs about the care of child during pregnancy period to prevent the occurrence of this issue among these females.

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