



Outcome of Teenage Pregnancy in Security Forces Hospital, Dammam, Saudi Arabia – 2019

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Background and Aims

Teenage pregnancy is coming up as one of the most important social and public health problems all over the world with a varying prevalence rate. In recent years the incidence is increasing due to early onset of puberty, early sexual activity in girls and relative lack of education on contraceptive methods. This study was aimed to determine the prevalence of teenage pregnancy among women who delivered in Security forces hospital Dammam city Saudi Arabia. Also study the effect of teenage pregnancy on the gestational age, premature and low birth weight of the infants, and the obstetric outcome as mode of delivery.

Objective

To determine the Outcome of Teenage Pregnancy in Security Forces Hospital, Dammam, Saudi Arabia – 2019.

Methods

A retrospective cross sectional study was performed over a period of 3 years. Data were retrieved from hospital records. All teenage mothers (aged 13-19 completed years at delivery) delivering in the Security forces hospital Dammam were taken. Dependent variable of (Teenage pregnancy), and Interdependent variables as Socio demography, maternal age, height and weight of mother, and mode of delivery, weight.

Results

- The 3 year period of record review in Security forces hospital, Dammam
- In Saudi Arabia ward indicated the 4768 deliveries were conducted.
- Among 4768 sampled cases there were 213 teenage pregnancy cases
- Making an incidence of 4.7% (1:21.4).

Table 1 shows the age distribution of teenage pregnant females attending to Security forces hospital, Dammam, in Saudi Arabia. From December 2016 to June 2018. The mean maternal age of females was 18years with SD equal to 1.4 years, the teenage female ages were ranged from 14 years to 19 years. 4.2% of the total females were in age group less than 15 years, 25.8% in 15-17 age group, and 70% in 18-19 years age (table 1)

Characters Age groups	teenage pregnant Female	n= 213 No. %	Median	Mode	Mean age	SD	Min –Max
Less than 15 years	9	4.2	18 years	19 years	18 years	1.4 years	14- 19 years
15-17 years	55	25.8					
18 – 19 years	149	70					
Total	213	100					

Table 2 shows The mean maternal weight of females was 70.3 Kg with SD equal to 16.3 Kg, the teenage female weight was ranged from 44kg to 109 kg. 1.4% of the total females were in weight less than 45 Kg, and 98.6% in normal or over weight (table 2)

character s Female n= 213	No. %	Mean	70.3 Kg
Wt ≥ 45 Kg	98.6	SD	16.3 Kg
Wt <45 kg			
3 1.4		Range	44-109 Kg
Total 213	100		

Table 3 show the mean maternal height of females was 156 cm with SD equal to 5.3 cm, the teenage female height was ranged from 140 cm to 168 cm. 1.9% of the total females were in height less than 145 cm, and 98.1% in normal height (table 3).

characters	n= 213	No. %	Mean	SD	Mode	Range
Female						
Ht < 145	4	1.9	156 cm	5.3 cm	156 cm	140 – 168 cm
Ht ≥ 145 cm	211	98.1				
Total	213	100				

Table 4 shows the gravida of teenage pregnant females attending to Security forces hospital, Dammam in Saudi Arabia. From December 2016 to June 2018. The majority of the teenage pregnant females 174 (81.7%) had prim gravid and the rest had gravidity between 1-4. (table)

Characters Teenage pregnant Female n= 213	No. %
Primi-Gravidia 174	81.7
G1 29	13.7
G2 5	2.3
G3 and above 5	2.3

Table 5 shows the gestational age of teenage pregnant females attending to Security forces hospital, Dammam in Saudi Arabia from December 2016 to June 2018. The majority of our teen age cases 171 (80.3%) delivered at 37-40 gestational age, while 8 (3.7%) delivered at <28 gestational age, 22 (10.3%) delivered at 28-36 gestational age and 12(5.6%) delivered at >40 weeks gestational age (table 5) .

Gestational age weeks	Female n= 213	No. %	Mean	SD	Mode 39	Range 26 – 41 weeks
<28 weeks	8	3.7	37.6 weeks	3.3 weeks	39 weeks	26 – 41 weeks
28-36 weeks	22	10.3				
37 -40 weeks	171	80.3				
>40 weeks	12	5.6				
Total 213	213	100				

Table 6 shows the obstetric outcome of teenage pregnant females attending to Security forces hospital, Dammam in Saudi Arabia. From December 2016 to June 2018. Regarding the mode of delivery, normal delivery was 153 (71.8%) and 19 (8.9%) were induced; and 41 (19.2%) of the cases delivered through caesarean section (table 6).

Mode of delivery	n= 213	No. %
Female		
Cesarean section	41	19.2
Vaginal	172	80.7
spontaneous	153	71.8
Induced	19	8.9
Total	213	100

Regarding the birth weight category of neonatal for teenage pregnant females attending to Security forces hospital, Dammam 2.3% of neonatal had <1000 gm birth weight, 0.9% had <1500 gm, 3.3% had <2000 gm, 1.4% had <2500 gm, while most of the neonates were in normal ≥ 2500 gm (92%). The mean of birth weight of neonatal was 2634 gm, SD equal to 663 gm, and ranged from 920 gm to 3440 gm.

Discussion

- Mortality and morbidity from early pregnancy whether ending in childbirth or abortion is much higher in the younger adolescents. Young women especially those who have less formal education are more vulnerable to pressures for marriage or sexual relations before marriage often with older men.
- Young people generally lack adequate knowledge about their own development and information as to how and when to seek help. Those who could help are rarely trained for working with adolescents and services, which are generally designed for adults, or children often deter young people from getting help when they most need it.
- In the developed countries while there is a positive relationship between reproductive maturation and subsequent reproductive behavior the negative effects of young maternal age on pregnancy outcome is confounded with socioeconomic factors. Teenage pregnancy or at least teenage birth occurs disproportionately among the socially and economically disadvantaged class of society.

- In developing countries the situation is quite different. First early marriage and childbearing are desired and common across most segments of society. Second malnutrition is widespread and is sufficiently severe to delay the adolescent growth spurt and rise average age at menarche by two to three years compared with scales found in developed countries (Riely 1994).
- Incidence of teenage pregnancy was 4.7% in the present study whereas other studies showed higher incidence in developing countries ranging from 8.3 to 23.4% (Lee et al.1998, Gortzak-Uzan et al. 2001). All mothers attending the hospital for deliveries were married. We did not come across any unmarried teenage mother in the study. Also our low incidence might be due to the fact that " In Islamic countries it is a common practice for unmarried mothers to go either for termination of pregnancy or to quacks for delivery because of strong social taboos preventing them to attend a large public hospital.
- As number of subjects of 15 yr and below was too small (9 out of 213) for statistical analysis, and as expected majority of younger teenagers were primigravida (81.7%). But it was surprising to find that nearly 19% of teenage mothers were carrying their second or third pregnancy. This finding suggests that teenage women have no control over fertility in Saudi Arabia and are exposed to repeated pregnancies at short intervals with all its inherent dangers. Poor weight gain during pregnancy in teenagers was reported in several studies (Kumbi and Isehak 1999, Ziadeh 2001). In the present study weight below 45 Kg or height below 145 cm were low reflecting an overall female well nutrition in Saudi Arabia.
- Regarding the mode of delivery, difference in observations is present. Some authors have reported increased operative (cesarean or instrument assisted) deliveries, Gortzak-Uzan et al. (2001), Kumbi and Isehak (1999), Scholl et al. (1994),and Konje et al. (1992) others found significantly less operative interventions, (Ziadah (2001), Lao et al. (1997) and Buitendijk et al. (1993) in adolescent age group. In the present study 19% only of teenage pregnancy females had operative cesarean delivery.

Conclusion

In conclusion, this study showed that our teenage pregnancy rate was lower than worldwide, with some results ranging from high rates of prematurity and LBW similar to reports from developed and developing countries. Like developed countries, the frequency of caesarean section in our study was less than the expected range

Recommendation

In conclusion, this study showed that our teenage pregnancy rate was lower than worldwide, with some results ranging from high rates of prematurity and LBW similar to reports from developed and developing countries.

Like developed countries, the frequency of caesarean section in our study was less than the expected range.

Adolescent campaigns are now receiving the publicity they deserve every day, and unless there is an improvement in the overall socioeconomic situation, female literacy, increased public awareness of appropriate sex education in school and the lifting of restrictions on adolescent access to contraceptive services, there is no longer any benefit in the term can be expected. Efforts should not be made to improve the social and demographic environment of pregnant adolescents to improve reproductive outcomes but also to reduce the incidence of teenage pregnancy by raising public awareness, enforcing marriage law and ensuring female education. The younger group is most at risk and should turn maximum attention to them.

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