



KAP STUDY OF MOTHERS WITH DIABETES IN PREGNANCY

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ABSTRACT

Background: In developing countries diabetes during pregnancy is a major cause of maternal morbidity and mortality. Knowledge, attitude and perception of pregnant women pertaining to diabetes during pregnancy have a significant impact on overall pregnancy outcome. **Material and Methods:** Two hundred diabetic mothers were enrolled for the study and were assessed for their knowledge, perception and attitude pertaining to diabetes in pregnancy and findings were recorded in a predesigned proforma. **Observations and Results:** Out of 200 mothers, only 24 (12%) of the mothers were aware of the normal level of blood glucose levels during pregnancy and 10 (5%) were aware about the causes of high blood glucose levels during pregnancy. Only 16% of the mothers were aware about the adverse effects of diabetes on mother's health and over all less than 50% were aware of the adverse pregnancy outcome. Forty five (45%) of the women were aware of the treatment options available. Seventy three percent of the mothers were attending antenatal clinics regularly and as many as 53% were on some form of medical treatment including dietary restrictions, oral metformin or insulin therapy. Despite being diabetic nearly half of the women (47%) were not on any form of treatment. Despite being diabetic as many as 1/3rd of the mothers were not taking any anti-diabetic medications. **Conclusions:** Pregnant women in our setup do not have sufficient knowledge pertaining to diabetes during pregnancy. Their perception of complication of diabetes in pregnancy is also poor and attitude towards preventing and treating diabetes poor too.

KEYWORDS : diabetes, pregnancy, KAP

Introduction:

Diabetes is a common chronic illness in almost all countries¹. India has the largest diabetes population in the world with an estimated 8.5 million people living with diabetes². Diabetes is associated with an increased risk of pre-eclampsia for mothers in the antepartum period and a higher risk for fetal and neonatal complications like macrosomia, hypoglycemia, jaundice, respiratory distress syndrome, polycythemia, and hypocalcemia in infants.³ After delivery the mother is at a higher risk for Type 2 DM, and the child of a woman with GDM is at a higher risk for metabolic syndrome.³ Knowledge, attitude and perception of diabetic pregnant women pertaining to diabetes in pregnancy is expected to have a huge impact on maternal, perinatal and neonatal mortality and morbidity.

Aim: The aim of this study was to assess the knowledge, attitude, and practices of antenatal women pertaining to diabetes in pregnancy attending antenatal clinic at AIMS Bathinda, Punjab

Material and Methods: The study was carried at AIMS Bathinda Punjab which is a tertiary care centre for women in Punjab, India. Study was commenced after taking informed consent from the pregnant women. Study was conducted between March 2017 and Oct. 2017. All those women who were pregnant and were diabetic (GDM, Type 1 or type 2) were enrolled in the study. Their knowledge, attitude, and practices pertaining to diabetes in pregnancy were recorded in a predesigned proforma.

Observations and results

Demographic characteristic of antenatal mothers are depicted in table 1. Knowledge, attitude and perception of women pertaining to diabetes in pregnancy are depicted in table 2.

Table 1 Demographic characteristic of antenatal mothers (n=200)

Demographic characteristic	No. of subjects/ %age
Age (years)	

	19 - 27	98 (49)
	28-35	66 (33)
	>35	36 (18)
Residence		
	Rural	142 (71)
	Urban	58 (29)
Family type		
	Nuclear	48 (24)
	Joint	152 (76)
Educational status		
	Illiterate	44 (22)
	< 8th standard	44 (22)
	8th to 10th standard	32 (16)
	undergraduate	34 (17)
	Graduate and above	26 (13)
Socioeconomic status		
	Lower	86 (43)
	Middle class	94 (47)
	Upper class	20 (10)

Discussion: We enrolled a total of 200 pregnant women with diabetes (blood glucose levels above normal) in our study. Majority of our study population was in the age group of 19 to 27 years (49%) followed by 28 to 35 years (33). One hundred and forty two (71%) women were from the rural background and 76% women were from joint families. Of the study population, 44% of women had education status of below 8th standard or were illiterate and just 13% were graduate or having higher qualification. Majority of the women (47%) were from middle class socioeconomic background closely followed by lower class (43%) (Table 1).

Out of 200 mothers, only 24 (12%) of the mothers were aware of the normal level of blood glucose levels during pregnancy and 10 (5%) were aware about the causes of high blood glucose levels during pregnancy. Only 16% of the mothers were aware

about the adverse effects of diabetes on mother's health and over all less than 50% were aware of the adverse pregnancy outcome. Forty five (45%) of the women were aware of the treatment options available. Seventy three percent of the mothers were attending antenatal clinics regularly and as money as 53% were on some form of medical treatment including dietary restrictions, oral metformin or insulin therapy. Despite being diabetic nearly half of the women (47%) were not on any form of treatment. Despite being diabetic as many as 1/3rd of the mothers were not taking any anti-diabetic medications (Table 2). Similar findings have been reported by Shriram V et al.⁴, Afridi JB et al.⁵ and Carolan M et al.⁶

Table 2 Knowledge, attitude and perception of expectant mothers regarding anemia in pregnancy (n=200)

Attribute		No. of cases / %age
Mothers know the normal blood glucose level during the pregnancy	Yes	24 (12)
Mothers aware about the causes of high blood glucose levels during pregnancy	Yes	10 (5)
Mothers aware about the harmful effects of high blood glucose levels during pregnancy on their own health	Yes	32 (16)
Mothers aware about the harmful effects of high blood glucose levels during pregnancy on their fetuses	Yes	60 (30)
Mothers aware about the treatment optional available	Yes	90 (45)
Mothers on regular antenatal care	Yes	146 (73)
Mothers on oral metformin and/or on dietary restrictions	Yes	82 (41)
Mothers on insulin therapy	Yes	24 (12)
Mothers on no treatment	Yes	94 (47)

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