



## A Study to Assess the Knowledge of Antenatal Mothers Regarding Polyhydramnios in Antenatal OPD at Selected Hospital Chinnakakani, Guntur District, A.P.

Authors

Polimetla Apoorva<sup>1</sup>, Uppu Jayalakshmi<sup>2</sup>

<sup>1</sup>MSc (OBG Nursing) Student, <sup>2</sup>Associate Professor (OBG Nursing)

NRI College of Nursing, Chinnakakani, Guntur District, Andhra Pradesh, India

Email: [appu.polimetla@gmail.com](mailto:appu.polimetla@gmail.com)

### Abstract

**Background:** *The growing fetus depends entirely on mothers healthy body, for all needs. Consequently pregnant women must take steps to remain as healthy and well nourished as they possibly can. Pregnant women should take into account for health care and life style considerations. Most cases of Polyhydramnios are mild and result form a gradual build up of amniotic fluid during the second half of pregnancy. Severe Polyhydramnios develop may cause shortness of breath, preterm labor or other signs & symptoms. Physiologically the volume of fluid increases with gestation to a maximum at 36-37 weeks. It has a number of purposes, including protecting the fetus from trauma and infection, allowing lung development of the limb and other skeletal parts.*

**Methodology:** *A Descriptive survey design was used to assess the knowledge of antenatal mothers regarding Polyhydramnios. Study was conducted among the antenatal mothers who are in the age group of 36yrs and above. Sample for this study was 150 antenatal mothers from NRI general hospital chinnakakani, Guntur district, Andhra Pradesh. Participants are selected by convinient sampling technique. Structured questinnarie is prepared with two sections i.e., Part-A consisting of questions on demographic variables and Part –B consisting the knowledge items on Polyhydrdramnios. Antenatal mothers answered questinnarie on Polyhydramnios. Their responses are tabulated, organized, analysed and interpreted by using descriptive and inferential statistics.*

**Results:** *The results shows that no antenatal mother is having adequate knowledge, 11.33% of antenatal mothers have moderate knowledge and 88.66% of antenatal mothers have inadequate knowledge about Polyhydramnios. There is a significant association between the knowledge and past history of Polyhydramnios.*

**Conclusion:** *Over all knowledge level regarding Polyhydramnios among antenatal mothers was deficit so information module is needed which will be helpful for them to improve this knowledge.*

**Keywords:** *Polyhydramnios, Knowledge, Antenatal mothers, Hospital.*

### Introduction

Pregnancy is a unique, exciting and often joyous time in a woman's life, as it highlights the woman's amazing creative and nurturing powers while providing a bridge to future. Many facets of

pregnancy are covered starting with the preparation and planning stages and moving through conception, fetal development, labor and delivery and postpartum stages.<sup>[1]</sup>

Polyhydramnios is a condition in which there is an excess of liquor amnii surrounding the unborn infant. Most fetal causes are the results of decreased fluid consumption through the gastrointestinal tract. In particular any fetal anomaly that impairs swallowing fluid from contacting the absorbative surface of the small intestine may cause Polyhydramnios.<sup>[2]</sup>

Polyhydramnios more common in women who have given birth many times before than in women who are going to have their first child. It may be acute occurring over a few days or chronic occurring over a few weeks.<sup>[3]</sup>

Women, in India play a vital role in producing and rearing the responsible citizens of the nation. The present and the future of any country depend on the efficiency of the women in the family. A pregnant woman is responsible to support the health of her unborn baby. The growing foetus depends entirely on the mother's health for all its need.<sup>[1]</sup> Polyhydramnios is a relatively common obstetrical complication. Major causes include maternal diabetes, chromosomal disorders, immunologic disease, congenital abnormalities, multiple gestations and idiopathic reasons.<sup>[4]</sup>

There is increased fetal and maternal morbidity associated with Polyhydramnios. Spontaneous preterm labour may occur. Successful management depends up on appropriate diagnostic evaluation. Prolongation of the pregnancy for further fetal maturation may be achieved with timely amniocentesis.<sup>[6]</sup> Very few studies are being conducted in this area and maternal morbidity mortality also increased with Polyhydramnios. Hence the investigator felt the need to assess the knowledge of antenatal mother regarding Polyhydramnios to reduce the complications.

### Objectives

1. To assess the knowledge of antenatal mothers regarding Polyhydramnios.
2. To find out the association between knowledge of antenatal mothers regarding Polyhydramnios with their selected variables.

### Hypotheses

**H<sub>1</sub>:** Significant association will be there between the knowledge of antenatal mothers on Polyhydramnios and their age.

**H<sub>2</sub>:** There will be significant association between knowledge of antenatal mothers on Polyhydramnios and their education.

**H<sub>3</sub>:** Association will be significant between knowledge of antenatal mothers on Polyhydramnios and their occupation.

**H<sub>4</sub>:** There will be significant association between the knowledge of antenatal mothers on Polyhydramnios and their income.

**H<sub>5</sub>:** Significant association will be there between knowledge of antenatal mothers on Polyhydramnios and their parity.

**H<sub>6</sub>:** Association will be significant between knowledge of antenatal mothers on Polyhydramnios and their source of information.

**H<sub>7</sub>:** Significant association will be there between the knowledge of antenatal mothers on Polyhydramnios and Past history of Polyhydramnios in their family.

### Methodology

A Descriptive survey design is used to conduct the study. The study is carried out among the antenatal mothers, who are in 36 above age group in NRIGH antenatal OPD, Chinakakani, Guntur district, Andhra Pradesh. One fifty antenatal mothers are selected for the study using convenient sampling technique. A structured questionnaire with part-A and part-B, is developed and used for collecting the data from the subjects. Part-A consists of seven items on demographic variables (like Age, Education, Occupation, Family Income, parity, Source of Information), part-B consists of 31 knowledge items on Polyhydramnios. The data collection is done personally by the investigator by administering the questionnaire to the study subjects during the month of December 2016. The responses of the antenatal mothers are organized and analysed by using descriptive and inferential statistics.

### Statistical Analysis

Data were entered into MS excel sheet and analysis was done by using descriptive and inferential statistics. Frequency and percentage were used to summarize the sample characteristics and for item wise analysis. Mean and Standard deviation were used to assess the knowledge mothers regarding polyhydramnios. Chi-square values computed to find out the association between knowledge of antenatal mothers on Polyhydramnios with the selected variables.

### Major Findings

#### Findings related to sample characteristics

Out of 150 antenatal mothers 62.6% are in the age group of 18-23 years, 28.6% are in the age group of 24-30 years, 5.3% are below 18 years, 3.3% are between 31-35 years, none of the mothers are 36 years and above. When it comes to education majority (21.3%) of antenatal mothers know to read and write, 20.6% have studied up to 6-10<sup>th</sup> class, 16% have intermediate qualification, 14% of antenatal mothers have studied 1-5<sup>th</sup> class, 14% of antenatal mothers studied graduation, 14% of mothers studied postgraduation and above. 73.3% of mothers are housewives and 26.6% are working women. Majority (32%) of antenatal mothers have a family income of rupees.3000/- to rupees.6000/-, 26.6% mothers have income of rupees.9000/- and above, 22% of antenatal mothers have family income of less than rupees. 3000/-. 19.33% of mothers have rupees.6000/- to 9000/- per month. 39.3% of mothers are gravida II, 34.6% are primigravida, 26% of mothers are gravida III and above. Pertaining to source of information 55.3% of antenatal mothers are getting information from health personnel, 20.6% from relatives, 15.3% from friends and only 8.66% are getting from mass media. When it comes to past history of information from health personnel, 20.6% from relatives, 15.3% from friends and only 8.66% are getting from mass media. When it comes to past history of polyhydramnios in family, 80.6% of antenatal mothers have no family history and

19.3% of mothers have past history of polyhydramnios in the family.

#### Findings related to knowledge of antenatal mothers on polyhydramnios

Majority (47.3%) of antenatal mothers knew that polyhydramnios means excess amount of amniotic fluid, 58% of antenatal mothers knew that amniotic fluid is a fluid present in uterus, 40.6% of antenatal mothers knew that normal amniotic fluid volume is 800-1000ml, 29.3% of mothers knew that amniotic fluid is important during pregnancy to protect the mother and baby from injury, 34.6% of mothers knew that more than 2000ml of amniotic fluid present in Polyhydramnios, 24.6% of mothers knew that maternal diabetes, multiple pregnancy, Rh disease are causes of Polyhydramnios, 30.6% of antenatal mothers knew that multiple pregnancy is risk factor for developing polyhydramnios. Very few mothers (37.3%) knew that rapid weight gain is common symptom for Polyhydramnios. 41.3% of mothers knew that breathlessness, edema, enlarged abdomen are clinical manifestation of Polyhydramnios, 31.3% of mothers knew that polyhydramnios can be identified by enlarged abdomen and troubled breathing, 45.3% of mothers knew that amniotic fluid index and ultrasonography are used to measure amniotic fluid. 38% of mothers knew that common procedure used for Polyhydramnios is amniocentesis. 22% of antenatal mothers knew that amniocentesis is performed during 22<sup>nd</sup> and 30<sup>th</sup> week of gestational age. 43.3% of mothers knew that amniocentesis means taking sample of fluid from uterus. 35.3% of mothers knew that when baby moving less than usual should contact health care provider in polyhydramnios. 31.3% of mothers knew that immediate care has to be taken when fluid leaking from vagina. 42% of mothers are known that premature birth can occur due to Polyhydramnios. 27.3% knew that Polyhydramnios is treated by removing extra amniotic fluid. 32% of mothers knew that control diabetes is preventive measure for

Polyhydramnios.40.6% of mothers knew that left lateral position is maintain during Polyhydramnios. 36% of mothers knew that postpartum hemorrhage is complication of

Polyhydramnios during postnatal period 38% of mothers knew that blurred vision is eye complication can occur during Polyhydramnios.

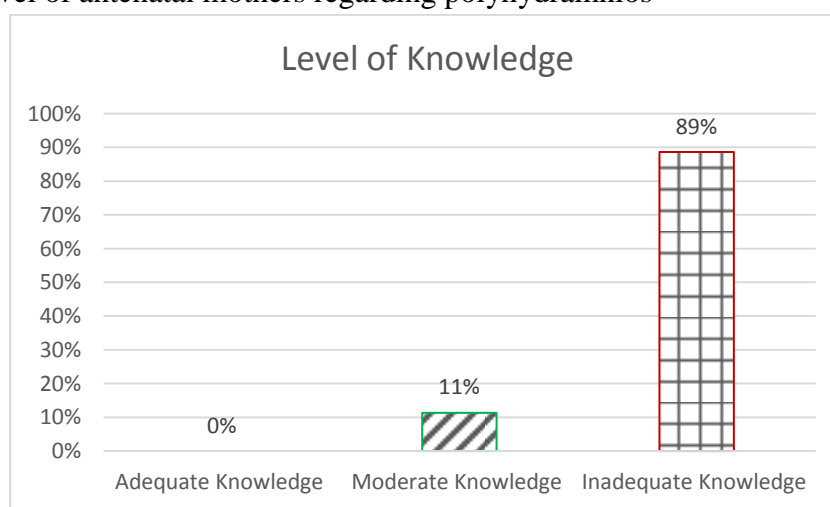
**Table -1:** Mean and Standard Deviation of Antenatal Mothers Based on their Knowledge with Regard to Polyhydramnios

N=150

S.No	Item	Mean (X)	Standard deviation (S.D)
1	Knowledge on Polyhydramnios	14.1	5.25

The mean score of knowledge level was 14.1with the standard deviation 5.25.

**Fig -1:** knowledge level of antenatal mothers regarding polyhydramnios



Majority (88.66%) of antenatal mothers have inadequate knowledge, only 11.33% have moderate knowledge and none of the mothers have adequate knowledge.

**Table-2:** Association between Knowledge of Antenatal Mothers with Selected Demographic Variables

N=150

S.No	Variable	Chi-square calculated value	Table Value	Degree of Freedom
1	Age	5.19 NS	15.51	8
2	Education	5.19 NS	18.31	10
3	Occupation	0.72 NS	5.99	2
4	Family income	2.22 NS	12.99	6
5	Parity	1.3 NS	9.49	4
6	Source of information	4.69 NS	15.51	8
7	Past history of Polyhydramnios in their family in theirfamily.	9.43*	5.99	2

**Note :-**\*Denotes significant at 0.05 level of significance

NS denotes not significant at 0.05 level of significance

The above table denotes that significant association exist only Past history of polyhydramnios in their family and the knowledge of antenatal mothers ( $\chi^2=9.43$ ) with

regard to polyhydramnios at 0.05 level of significance. No significant association is found between Age ( $\chi^2 = 5.19$ ), Education ( $\chi^2 =5.19$ ), Occupation ( $\chi^2 =0.72$ ), Family Income ( $\chi^2$

=2.22), parity ( $\chi^2 = 1.3$ ), Source of Information ( $\chi^2 = 4.69$ ) and knowledge of antenatal mothers with regard to polyhydramnios at 0.05 level of significance.

### Discussion

Majority of antenatal mothers (94 i.e. 62.6%) were between the Age group of 18-23 years, followed by 43 antenatal mothers (28.6%) were between the age group of 24-30 Years, eight (5.3%) were in the age group of below 18 years and only five antenatal mothers were between the age group of 31-35 years. Shrutisaralaya et. al in their study reported that maximum no of mothers (41%) were in between the age group of 21-35 years. Majority of antenatal mothers 32 (21.3%) knows to read and write followed by 21(14%)\_ mothers were educated up to 1-5th class 21(14%) mothers were educated up to graduation 21(14%) antenatal mother were educated up to postgraduation 31 (20.6) mothers were educated up to 6th– 10th class only 24 (16%) antenatal mother educated upto intermediate. . Majority of subjects (59 i.e. 39.3%) are gravida – II, followed by (52 i.e. 34.6%) are primigravida and (39 i.e. 26%) are gravida III & above shrutisaralaya et.al in their study also reported that 56% of antenatal mothers are multigravida. As per Source of information majority of subjects received information from health personnel (83 i.e 53.3%) followed by (31 i.e. 20.6%) are received information from relatives 23 (15.8%) are received from friends and only 13 respondents (8.66%) are received from mass media. In the knowledge scores out of 150 antenatal mothers most of the antenatal mothers have (133 i.e 88.6%) inadequate knowledge followed by 17 (11.3%) antenatal mothers who have moderate knowledge and none of the antenatal mother (0%) having adequate knowledge regarding Polyhydramnios.

In the present study it is found that significant association is existing only between the knowledge regarding to Polyhydramnios and

past history of Polyhydramnios in their family at 0.05 level of significance ( $\chi^2 = 9.43$ ). No significant association was found between knowledge of antenatal mothers regarding Polyhydramnios and their age ( $\chi^2=5.19$ ), education ( $\chi^2=5.19$ ), occupation ( $\chi^2=0.72$ ), family income ( $\chi^2=2.2$ ), parity ( $\chi^2=1.3$ ) and source of information ( $\chi^2=4.69$ ). Over all knowledge level regarding Polyhydramnios among antenatal mothers was deficit so information module is needed which will be helpful for them to improve this knowledge.

### Conclusion

Study concluded that majority of respondents had Inadequate knowledge on Polyhydramnios. The knowledge of Antenatal mother regarding Polyhydramnios is significantly influenced by Past history of Polyhydramnios. There is no association between the knowledge of antenatal mothers regarding Polyhydramnios and Variables of Age, Education, Occupation, Family income, Parity, Source of information and Past history of Polyhydramnios.

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