A comparative study to assess the Knowledge on Traditional Harmful Practices in neonatal care among antenatal mothers at selected urban and rural Health centers of Tirupathi

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Abstract:-Background: Birth means the bestowing of some form of life by the nature, to this world. Being born is the purest virtues that can be held by a living being as after that one is exposed to life, where one can breathe, feel, have emotions. Through home based newborn care, successful healthy behavior change in newborn care can be achieved, provided the health care workers equip themselves with a detailed understanding of key traditional practices. The objective of this study was to examine the selected harmful traditional practices related to colostrum, cord care, breast feeding thermal care, ear care and eye care.

Objectives:

- **To assess the knowledge on traditional harmful practices among antenatal mothers of attending rural and urban health centers.**
- **To compare the knowledge of antenatal mothers attending between rural and urban health centers on traditional harmful practices in neonatal care.**
- **To find out the association between the knowledge scores of antenatal mothers with selected demographic variables.**
- **To develop and distribute an information booklet on preventing traditional harmful practices in neonatal care.**

Methods: In the present study the researcher adopted non experimental descriptive research design. For this study non-probability Purposive sampling technique was adopted to select the sample based on inclusive and exclusive criteria. The sample consists of 100 antenatal mothers. Among 100, 50 antenatal mothers from rural Health center Chandragiri and 50 antenatal mothers from urban Primary Health center Prakasam Road, Tirupati. Later the investigator collected data from the mothers after obtaining their consent. Data collected from 100 antenatal mothers who are attending rural & urban health center praksham road Tirupati. Each subject given with structured questionnaire and responses noted.

Results: The results shown that the overall knowledge scores obtained by rural health center antenatal mothers mean value was 17.88 and urban health center antenatal mothers mean value was 20.70,urban health center antenatal mothers standard deviation was 5.57 and rural health center antenatal mothers standard deviation was 4.32 the obtained t-value was 2.828which was highly significant at 0.006 (p< 0.01) level shows that there was high significant difference in knowledge levels of antenatal mothers among rural and urban health center.**

Conclusions: Main factors affecting the knowledge score of the mothers about neonatal care were educational status and Antenatal checkup. Knowledge about adequacy of breastfeeding, Immunization at birth, Danger signs, Temperature maintenance and hygiene was less in rural mothers as compared to urban mothers.

Keywords: Neonatal care, Antenatal mothers, breastfeeding, Immunization, Infant mortality rate.

INTRODUCTION

Annually around 7.7 million children ages less than 5 years die, of whom 3.1 million die in the neonatal period, and 99% of such deaths are occurring in the developing world[1]. Neonatal deaths account for 45% of under-five deaths according to WHO estimation[2]. One-third of these deaths take place in the first 24 h of birth, and three-quarters of neonatal deaths happen in the first seven days of birth[3]. India's Neonatal Mortality Rate (NMR) was 23.5/1000 live births[4&5].

Infant mortality rate (IMR) is appeared as an important sensitive indicator of health repute of

network, in particular maternal and baby fitness. The IMR of India is 32/a thousand live beginning, of Rajasthan is 37/a thousand stay birth as according to sample registration system (SRS)[6], shockingly 70.7% of all these deaths arise in neonatal length. among the17 Sustainable improvement dreams (SDGs) set via United nations in 2015, the third purpose, target states that all nations purpose to position a stop to tens of millions of avoidable deaths of newborns and beneath-5 children with the aid of 2030. The targets to achieve are: reduction in neonatal mortality and under-5 mortality to no more than 12 and 25 deaths according to 1000 live births respectively[7].

Infant mortality fee (IMR) is seemed as an vital sensitive indicator of fitness reputation of community, specially maternal and toddler health. The IMR of India is 32/1000 stay beginning, of Rajasthan is 37/one thousand live delivery as in step with pattern registration machine (SRS)6, shockingly 70.7% of these types of deaths arise in neonatal duration. amongst the17 Sustainable development dreams (SDGs) set by United nations in 2015, the 3rd aim, goal states that each one international locations intention to place a prevent to hundreds of thousands of avoidable deaths of newborns and underneath-five children by means of 2030. The goals to obtain are: reduction in neonatal mortality and beneath-5 mortality to no greater than 12 and 25 deaths per a thousand stay births respectively[7]. Majority of low-earnings international locations are a ways in the back of reaching this goal particularly because of slow development in lowering neonatal death[8&9]. In Rajasthan there's terrible maternal education, lack of knowledge a closer to neonatal care. full-size assessment of the literature revealed that only some research have been conducted to study maternal information about neonatal care. consequently, the existing look at is being done to know approximately mom's know-how of city and Rural mothers regarding neonatal care and their information approximately chance signs so that suitable action may be taken within Time to are trying to find scientific advice, and thereby helping to lower alarmingly high little one mortality rate of the nation of Rajasthan. The components of vital new child care services as in line with WHO incorporates: promoting of different breast feeding and begin at once after beginning (inside one hour), thermal protection (Kangaroo mother Care), prevention and early remedy of hypothermia, hygiene, immunization, control of contamination and accurate great antenatal care, secure transport and optimum care at birth[10].

Therefore, it is necessary for the mother and her family to understand these aspects of child birth and newborn care and be prepared to react for the potential danger signs. Hence with much more interest of researcher the study was selected to assess and compare the knowledge regarding traditional harmful practices in neonatal care among antenatal mothers at selected rural and urban community. The objective of this study was to examine the selected harmful traditional practices related to colostrum, cord care, breast feeding thermal care, ear care and eye care.

MATERIALS AND METHODS

This study was carried out in rural and urban health centers of Tirupati district, the target population of this study consisted of antenatal mothers who met the inclusion criteria like who are between 20-60 years, who are available during the data collection time. The target population of this study consisted of 100 antenatal mothers. Among 100, 50 antenatal mothers from rural Health center Chandragiri and 50 antenatal mothers from urban Primary Health center Prakasam Road, Tirupati.

Sample size formula adjusted sample size formula was adopted by,
A=Assumpted antenatal mothers.
n= number of sample size 100.
P= total antenatal mothers (population 660)

$$A = n/(1+(n-1)/P)$$

A=100/(1+(100-1)/660
A=100/(1+(99)/660
A=100.15

Tools for data collection:
The tool was divided in to 3 parts.

SECTION-I: Deals with socio-demographic data of participants.

SECTION-II: Deals with knowledge related to traditional harmful practices in neonatal Care.
Section -II comprises of three parts.
Part -A: Deals with questions related to care of neonate in general.
Part B: Deals with questions related to specific knowledge of antenatal mother regarding traditional harmful practices.
Part-C: Deals with practices adopted in neonatal care.

Data collection procedure:

In order to collect the data, formal written permission was obtained from the Medical officer urban primary health center, prakasham road, Tirupati and medical officer rural health center, chandragiri before conducting the study. The data collection was done from UPHC 27.04.2024 to 04.05.2024 and RHC 22.07.2024 to 03.08.2024 the investigator introduced self and establishes rapport with the study subjects to ascertain their Co-operation for the study. Later the investigator collected data from the mothers after obtaining their consent. Data collected from 100 antenatal mothers who are attending rural & urban health center praksham road Tirupati. Each subject given with structured questionnaire and responses noted. If un educated and can't able to read telugu, investigator explained questionnaire and responses noted. This process continued till 100 sample size is achieved.

Information booklet regarding prevention of traditional harmful practices in neonatal care distributed to antenatal mothers at the end of interview. The investigator thanked the mothers and authorities for their co-operation and support prior of the study and after the study.

Data was tabulated, analyzed and interpreted according to the objectives and hypothesis of the study by using descriptive and inferential statistical methods like Frequency and percentage distribution, Mean, Median, Mode and Standard Deviation, paired t test, student t test and chi square.

RESULTS AND DISCUSSION

A total of 100 antenatal mothers were participated in the study. The socio demographic variables shown that in relation to age majority 30(60%) of rural mothers were 21-25 years and urban a mothers majority 23(46%) were 26-30 years. In respect to religion majority of rural health center mothers 43(86%) were Hindus and from urban health center majority 40(80%) of mothers were Hindus. With regard to education from rural health center majority 17 (34%) of mothers had primary education and from urban health center majority 17 (34%) of mothers had degree and above, 15(30%) of mothers had secondary education. It shows higher education seen in urban antenatal mothers.

Table 1: Frequency and percentage distribution of antenatal mothers of rural and urban according to level of knowledge about care of neonate in general

N=100

			Place of Residence		Total
			Rural	Urban	
Knowledge on care of Neonate in general	Inadequate	N	21	15	36
		%	42.00%	30.00%	36.00%
	Moderate	N	25	19	44
		%	50.00%	38.00%	44.00%
	Adequate	N	4	16	20
		%	8.00%	32.00%	20.00%
Total		N	50	50	100
		%	100.00%	100.00%	100.00%

The above table explained that of from rural Health center, Chandragiri majority 25(50%) had moderate knowledge where as from UPHC Prakasam Road Tirupathi19(38%) antenatal mothers only had moderate knowledge, majority 16(32%) of mothers had adequate knowledge in urban Primary Health center Prakasam Road Tirupati, where as rural Health center Chandragiri 4(8%) of antenatal mothers only had adequate knowledge, highest 21(42%) rural mothers had inadequate knowledge, 15(30%) of urban mothers only had inadequate knowledge care of neonate in general.

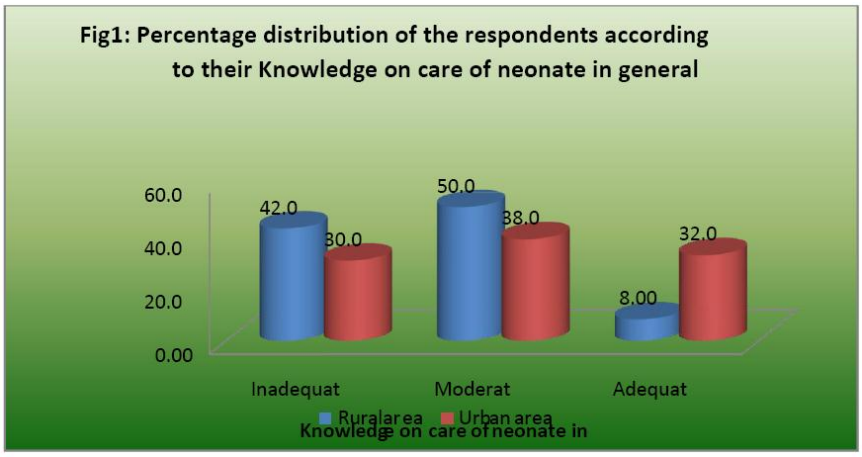

Table 2: Frequency and percentage distribution of antenatal mothers of rural and urban according to level of knowledge specifically regarding traditional harmful practices in neonatal care.

N=100

			Place of Residence		
			Rural	Urban	Total
Knowledge regarding traditional harmful practices	Inadequate	N	30	18	48
		%	60.00%	36.00%	48.00%
	Moderate	N	10	13	23
		%	20.00%	26.00%	23.00%
	Adequate	N	10	19	29
		%	20.00%	38.00%	29.00%
Total		N	50	50	100
		%	100.00%	100.00%	100.00%

The above table explained that of from rural majority 36(60%) of mothers had inadequate knowledge, whereas from urban18 (36%)of mothers had in adequate knowledge, 10 (20%) of mothers had moderate knowledge from rural where as urban13(26%)of mothers had moderate knowledge, and from urban Health center Prakasam Road Tirupatimajority19(38%) of mothers had adequate knowledge and rural Health center Chandragiri only 10(20%) of mothers had adequate knowledge in traditional harmful practices.

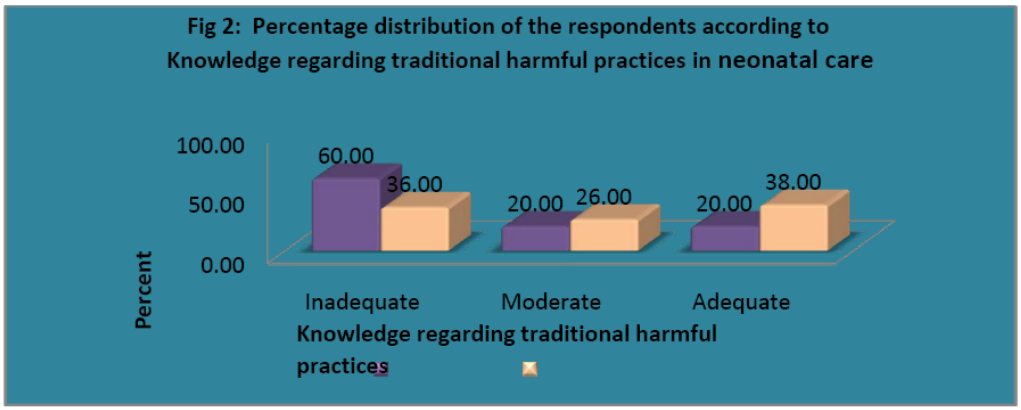

Table 3: Frequency and percentage distribution of rural and urban antenatal mothers according to practices adopted in neonatal care.

N=100

			Place of Residence		Total
			Rural	Urban	
Practices adopted in neonatal care	Maximum	N	16	7	23
		%	32.00%	14.00%	23.00%
	Moderate	N	23	24	47
		%	46.00%	48.00%	47.00%
	Minimum	N	11	19	30
		%	22.00%	38.00%	30.00%
Total		N	50	50	100
		%	100.00%	100.00%	100.00%

The above table depicted that of from urban health center majority 24(48%) of antenatal mothers had moderate practices where as rural health center 23(46%)of antenatal mothers had moderate practices, highest 16(32%) of mothers had maximum practices from rural health center where as from urban community7(14%)of mothers only had maximum practices, 19(38%) of mothers had minimum practices in urban health center where as11(22%)of mothers only had minimum practices in rural health center.

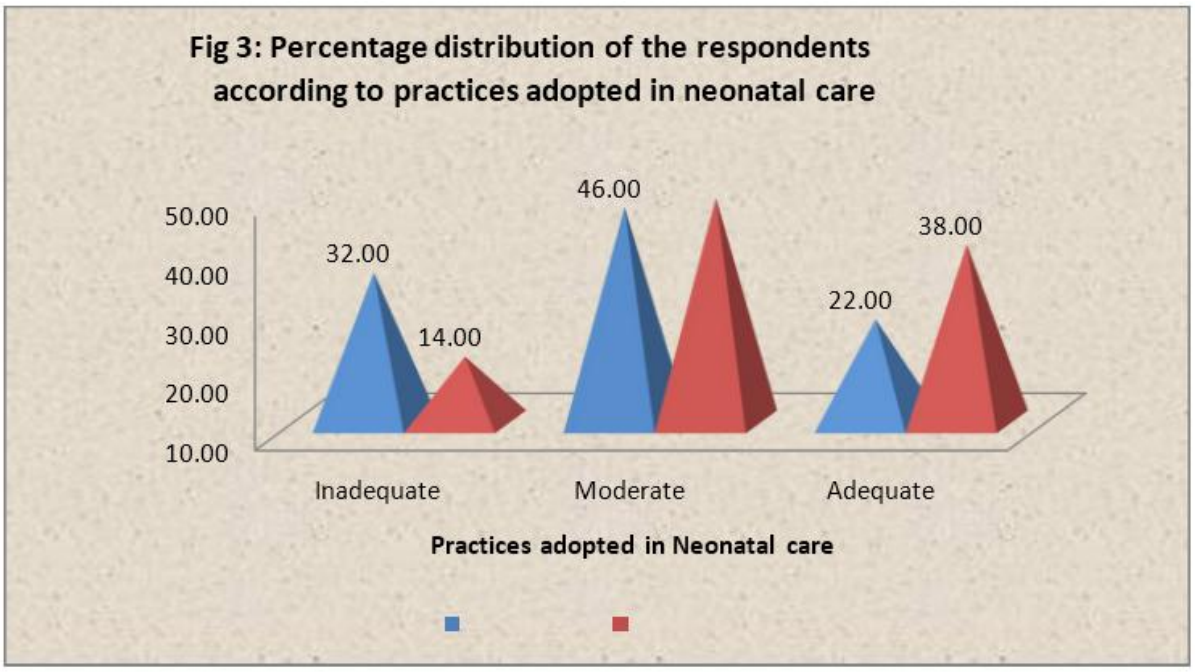

Table 4: Frequency and percentage distribution of rural and urban antenatal mothers according to overall level of knowledge regarding traditional harmful practices in neonatal care.

N=100

Variables	Category	N/%	Place of Residence		Total
			Rural	Urban	
Level of Knowledge	Inadequate	N	17	10	27
		%	34.00%	20.00%	27.00%
	Moderate	N	28	24	52
		%	56.00%	48.00%	52.00%
	Adequate	N	5	16	21
		%	10.00%	32.00%	21.00%

Total	N	50	50	100
	%	100.00%	100.00%	100.00%

The above table explained that of in total knowledge, rural area majority 28 (56%) of mothers had moderate knowledge where as urban health center 24(48%)of mothers had moderate knowledge, highest 17(34%) of mothers had inadequate knowledge from rural health center and 10(20%) of mothers only had inadequate knowledge from urban area, and highest 16(32%) of mothers had adequate knowledge from urban health center, in respect to rural health center5(10%)of mothers only had adequate knowledge regarding traditional harmful practices in neonatal care. There was significant knowledge among antenatal mothers who are attending rural and urban health center. Hence, hypothesis-1was accepted.

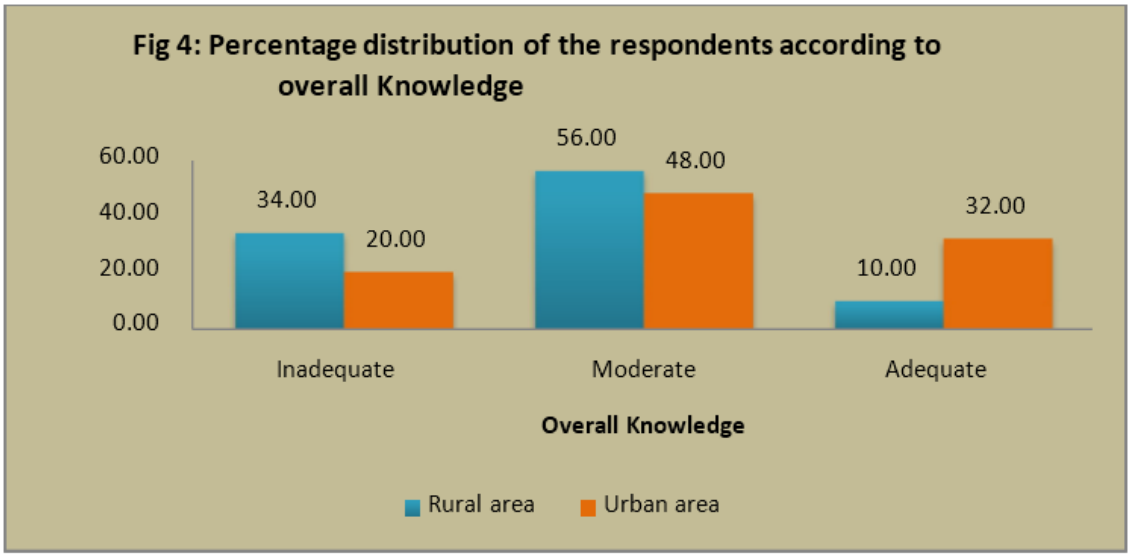

Table 5: Comparison of knowledge scores regarding traditional harmful practices in neonatal care between antenatal mothers of in rural and urban health centers.

N=100

Section wise Knowledge	Place of Residence	N	Mean	Std. Deviation	t-value	p value
Knowledge on care of neonate in general	Rural	50	6.82	1.75	2.116*	0.037
	Urban	50	7.70	2.37		
Knowledge regarding traditional harmful practices in specific	Rural	50	5.06	2.30	2.650**	0.009
	Urban	50	6.32	2.45		
Practices adopted in neonatal care	Rural	50	6.00	1.54	2.117*	0.037
	Urban	50	6.68	1.67		
Total Knowledge	Rural	50	17.88	4.32	2.828**	0.006
	Urban	50	20.70	5.57		

Note: **=Significantat0.01level *=Significantat0.05level

The above table shows that on care of neonate in general the knowledge scores mean value of rural antenatal mothers was 6.82 and urban antenatal mothers meanvaluewas7.70and rural antenatal mothers standard deviation was 1.75 and urban antenatal Mothers standard deviationwas2.37, the t-value obtained 2.117*which was significant at 0.037($p<0.05$) level, shows comparatively there was less significant difference in knowledge levels on care of neonate in general.

The knowledge scores specifically on traditional harmful practices in neonatal care, the rural antenatal mothers mean value was 5.06 and urban antenatal mothers mean value was 6.32, rural antenatal mothers standard deviation was 2.30 and urban antenatal mothers standard deviation was 2.45,the obtained t-value was 2.650**which was significant at 0.009 ($p<0.05$) level. It shows there was less significant difference in knowledge scores specifically regarding traditional harmful practices in neonatal care.

The knowledge scores on level of practices adopted in neonatal care, rural antenatal mothers mean was 6.0 and urban antenatal mothers mean was 6.68, standard deviation of rural antenatal mothers was 1.54 and urban antenatal mothers was 1.67 ,the obtained t value was 2.117* which was significant at 0.037 ($p< 0.05$) level. It shows that there was less significant difference in knowledge levels on practices adopted in neonatal care.

Comparatively the overall knowledge scores obtained by rural health center antenatal mothers mean value was 17.88 and urban health center antenatal mothers mean value was 20.70,urban health center antenatal mothers standard deviation was 5.57 and rural health center antenatal mothers standard deviation was 4.32 the obtained t-value was 2.828**which was highly significant at 0.006 ($p< 0.01$) level shows that there was high significant difference in knowledge levels of antenatal mothers among rural and urban health center. Hence, the hypothesis-1 framed for the study was accepted.

The association between demographic variables and the level of knowledge regarding traditional harmful practices in neonatal care were determined by using chi-square test which revealed that there was a significant association with age, educational status, income of family per month, source of information regarding traditional harmful practices at P=0.01 level and occupation of mother, place of residence had least significant association with knowledge regarding traditional harmful practices P=0.05 level.

Limitations: The limited sample size places a limitation on the generalization of the study findings.

- Knowledge on traditional harmful practices among antenatal mothers were assessed. only through the written and verbal responses through interview schedule, which may be selective to various factors like inhibition of self-expression. This study assessed only the antenatal mother's knowledge.
- The antenatal mothers residing in selected rural and urban community, Tirupati only selected as sample for the study.

Conflict of Interest: The authors confirm that they have no conflicts of interest for this study.

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