

A comparative study was undertaken to assess the knowledge, attitude and practice regarding selected aspects of postpartum care among caregivers of postnatal mothers in selected rural area

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ABSTRACT : A comparative study was undertaken to assess the knowledge, attitude and practice regarding selected aspects of postpartum care among caregivers of postnatal mothers in selected rural area at Khammam, Telangana. The objectives of the study were to assess the levels of knowledge, attitude and practice regarding selected aspects of post-partum care among caregivers of postnatal mothers, to compare the knowledge, attitude and practice regarding selected aspects of postpartum care and to associate the knowledge, attitude and practice scores with their selected socio-demographic variables caregivers of postnatal mothers. A comparative descriptive research approach was used for this study. The study was conducted at Raghunadhapalem rural area and Ballepalli, urban area at Khammam, Telangana. The population for this study were caregivers of postnatal mothers. The sample size of this study was 100 (50+50) and sample was selected by non-probability convenience sampling technique. Data was collected by using structured interview schedule. Difference between the knowledge, attitude and practice and their means of selected aspects of postpartum care among caregivers of postnatal mothers. About knowledge means in rural and urban areas were 14.10 and 16.68 respectively. Standard deviations were ± 3.29 and ± 3.3 respectively. The mean difference was 2.58. Difference between the attitude means of selected aspects of postpartum care among caregivers of postnatal mothers of rural and urban areas were 36.08 and 36.02 respectively. Standard deviations were ± 2.15 and ± 2.48 respectively. The mean difference was 0.06. Difference between the practice means of selected aspects of postpartum care among caregivers of postnatal mothers rural and urban areas were 10.08 and 10.10 respectively. Standard deviations were ± 1.34 and ± 2.16 respectively. The mean difference was 0.02. The study was concluded that the comparison of knowledge, attitude and practice levels regarding selected aspects of postpartum care among the caregivers of postnatal mother's about knowledge, and practice levels are more than urban area and less in rural area and about attitude levels rural area caregivers having slightly high attitude levels than the urban.

I.INTRODUCTION

"When you are a mother you are never alone in your thoughts. A mother always has to think twice, one for herself and one for her child". - Sophia Loren

Mothers and youngsters constitute extra than 1/2 of of the whole populace in our country. Delivery of a brand new infant is one of the happiest instances in women's lifestyles, however additionally gives with bodily and emotional adjustments. Postpartum duration starts offevolved at once after the childbirth and extends for approximately 6 weeks. Effective postnatal duration is an critical section with inside the mom's lifestyles. Postnatal care is one of the maximum critical maternal fitness cares for now no longer most effective prevention of impairment and disabilities, however additionally discount of maternal mortality.¹

In this postpartum duration maximum of the adjustments of being pregnant, labor, and shipping are resolved, the frame has reverted to the non-pregnant nation and mom will get better to her pre-being pregnant fitness.²

Problems skilled via way of means of the moms withinside the postpartum duration consists of postpartum infections, postpartum hemorrhage, puerperal pyrexia, puerperal sepsis, postpartum eclampsia, perineal pain, vaginal discharge, urinary headaches in puerperium, endometritis, rectal or uterine prolapse, sub-involution of

uterus, hemorrhoids, constipation, urinary or fecal incontinence, Puerperal venous thrombosis, and pulmonary embolism. Puerperium breast headaches are breast engorgement, cracked nipple, retracted nipple, inverted nipple, acute mastitis, contamination and clogged ducts, and nipple discharge. Psychiatric problems like puerperal blues, postpartum despair and postpartum psychosis.³

Minor issues skilled via way of means of new child infant are bloodless and flu, pores and skin issues, diaper rash, diarrhea, constipation, sticky eyes, stuffy nose, vomiting, fever, coughing, ear contamination, and oral thrush. Complications are belly distention, breathing distress, meconium aspiration syndrome, pneumonia, neonatal jaundice, hyper bilirubinemia, kernicterus, hemolytic disorder of new child, bleeding problems in new child, anemia, seizures, intracranial hemorrhage, ophthalmic neonatorum, necrotizing enterocolitis and mucocutaneous candidiasis.⁴

Lack of understanding concerning postnatal care may also lead the mom to extensive variety of postpartum issues. In order to save you a lot of these issues, set off postpartum care is critical after the shipping of the infant until the 6th week. During this era the care is critical now no longer most effective for the mom however additionally for the child. The widespread postnatal care consists of provision of ambulation, rooming in, colostrum feeding, extraordinary breast feeding, comply with up care, diet, postnatal exercise, identity of peculiar signs and symptoms and mental help, care of the breast, own circle of relatives making plans recommendation and guidance, ok rest, bowel and bladder care.⁵

The American Academy of Pediatrics has advocated that Newborn care and protection are the sports and precautions advocated for dad and mom or caregivers. Newborn care consists of hand washing, keep hygiene, each day bathing, infant checkups, vaccination, extraordinary breast feeding, kangaroo mom care, rooming in, weight tracking and keep away from the smoking close to the infant. 6

3 Care withinside the duration following start is vital now no longer most effective for survival however additionally to the destiny of moms and new child babies. Postnatal care preeminently approximately the supply of a supportive surroundings wherein a lady, her infant and the broader own circle of relatives can start their new lifestyles together.⁷

Postpartum care is essential to make sure that no headaches have advanced withinside the lady after childbirth. It is critical that moms their companions and care givers are knowledgeable of what generally takes place all through this era, and that they must realize the threat symptoms and symptoms that could compromise the fitness of the mom or the new child. Recommendations to sell maternal fitness encompass setting up policies concerning postpartum maternal fitness, re-comparing and reforming this system of recurring postpartum fitness care, encouraging own circle of relatives help, supplying help groups, designing long time instructional applications and undertaking studies targeted on postpartum maternal fitness.⁸

II. NEED FOR THE STUDY

Maternal mortality refers to deaths due to complications from pregnancy or childbirth. Postpartum complications contribute to a lot of maternal morbidity. These complications not only lead to various short term and long term, but also cause mortality.

WHO estimated maternal morbidity is unacceptable high, about 830 women die from pregnancy or childbirth-related complications around the world every day. Though the maternal mortality ratio declined by 37 per cent between 2000 – 2015, there were an estimated 3,03,000 maternal deaths worldwide in 2015 due to complications in pregnancy and childbirth. Almost all 99% occurred in developing regions, with the highest level 546 per 100,000 live births in sub-Saharan Africa, followed by South Asia 182 per 100,000 live births.⁹

A recent sample registration system estimates data in India 22 percent decline in maternal mortality ratio MMR since 2013. In India the MMR declined to 130 in 2014-16 from 167 in 2011-13, In 2010 to 2012 MMR is 178 deaths. In Andhra Pradesh 110 deaths per 100,000 births.¹⁰

Indian College Of Obstetricians and Gynecologists (ICOG) and Federation Of Obstetrics and Gynecology Scientists of India (FOGSI) Estimates that maternal deaths in 2016-2017 in Telangana state in Hyderabad 105, Medak 38, Mahbubnagar 30, Warangal 19, Khammam 18, Nalgonda 16, Adilabad 16, Karimnagar 15, maternal deaths per district wise in year.¹¹

As Centre for Global Health Research reported in 2018, 14 million women around the world suffer from postpartum hemorrhage. The five most common direct causes of pregnancy-related mortality in India were hemorrhage 38%, sepsis 11%, unsafe abortion 8%, hypertensive disorders 5% and obstructed labor 5%. The remaining 34% of maternal deaths were due to unspecified indirect causes. Post-Partum Hemorrhage (PPH) is a frequent complication of delivery and its reported incidence in India is 2% - 4% after vaginal delivery and 6% after cesarean section with uterine atony being the most common cause 50%.¹²

According to WHO in 2015 Preeclampsia/Eclampsia (PE/E) was the most common, direct cause of maternal deaths 24.4% followed by obstetric hemorrhage 19.9%, puerperal sepsis 14.5%, post-aortal complications 44.7%, obstructed labor 1.8% and rupture uterus 2.9%, Anemia was the most common 15.3% indirect cause followed by cardiac disease 3.2%. Anesthetic complications, seizure disorder, road traffic accident (RTA) and uterine inversion were a cause of death in a very few patients, psychosis disorders overall incidence rate is 15-20%, puerperal blues nearly 50%, 5 postpartum depression 10-20%, and postpartum psychosis is 0.14-0.26%, 307 (47.4%) women died within 24 hours of presentation to the hospital and another 157 (24.2%) did not survive beyond 72 hours. On evaluating the charts of patients, it was found that 584 women received ICU care in low- and middle-income countries puerperal infections are the sixth leading cause of disease burden in women during their reproductive years. Postnatal complications are major health problems in developing country like India.¹³ Several studies in both high- and low-income countries have identified the importance of the postpartum period for acute short-term, long-term, and chronic morbidity. Moreover, up to two thirds of maternal deaths occur after delivery¹⁴.

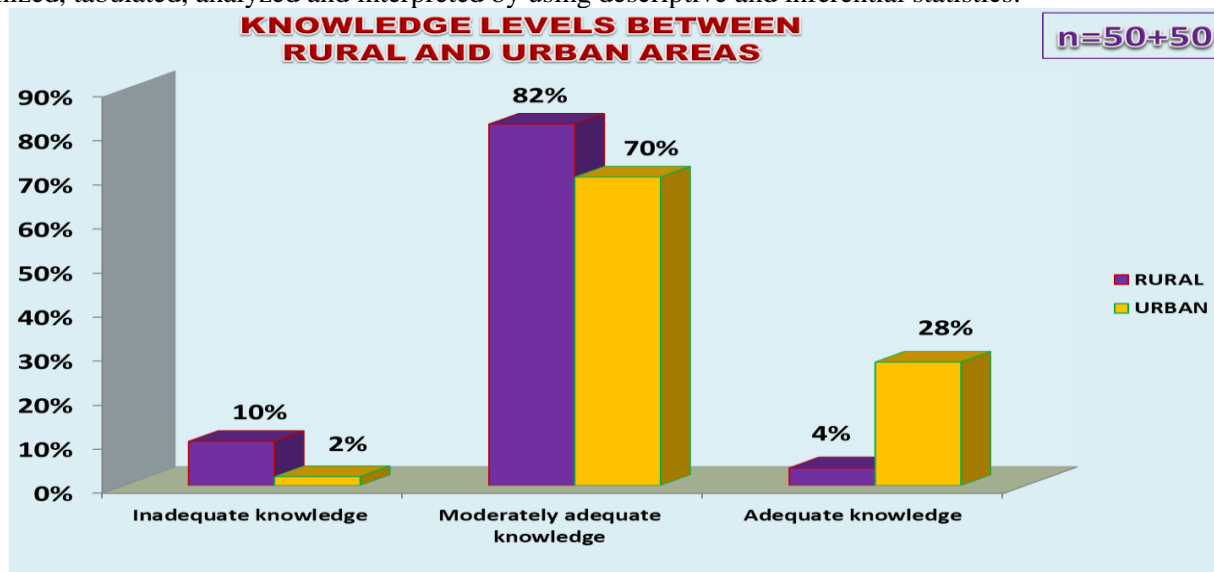
Therefore, the World Health Organization suggests that health care should be provided at 6 hours, 6 days, 6 weeks, and 6 months post-delivery, in order to ensure women's physical and mental health and well-being. Despite this recommendation, seven out of ten women do not receive any postpartum care¹⁵. Based on much literatures and investigator is interested to find out their knowledge, attitude and practices help to gain knowledge, awareness and good practices of caregivers of postnatal mothers so has to help them to promote long-term physiological and emotional wellbeing.

III. RESEARCH METHODOLOGY

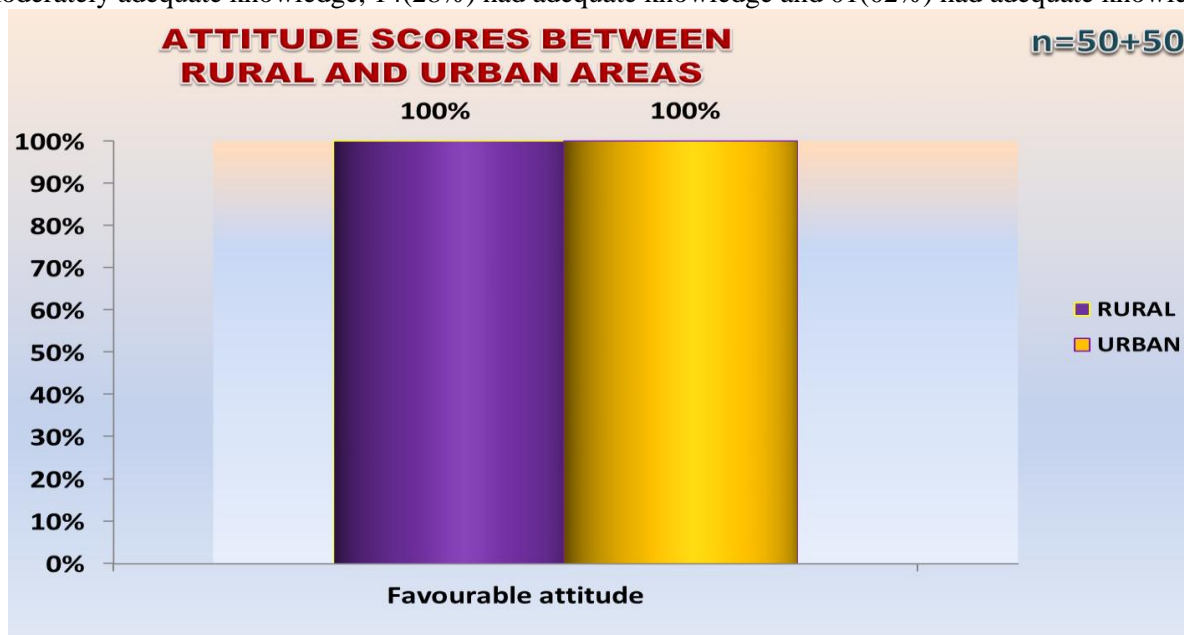
RESEARCH APPROACH was Survey approach and RESEARCH DESIGN was Comparative descriptive design. Study was conducted at Raghunadhapalem rural area and Ballepalli urban area at Khammam, Telangana. POPULATION : Caregivers of postnatal mothers who are in the age group between 21-50 years. The SAMPLE SIZE was 100(50 rural+50 urban). SAMPLING TECHNIQUE was Non-probability convenience sampling technique was used for this study. DATA was collected by Interview technique. TOOL USED FOR DATA COLLECTION: Structured interview schedule. VARIABLES OF THE STUDY: Research variables: Knowledge, attitude and practice of caregivers of postnatal mothers regarding selected aspects of postpartum care. Socio-demographic variables: Age, religion, marital status, education, occupation, family income, experience of providing post-natal care, sources of information regarding postpartum care.

IV. ANALYSIS AND INTERPRETATION

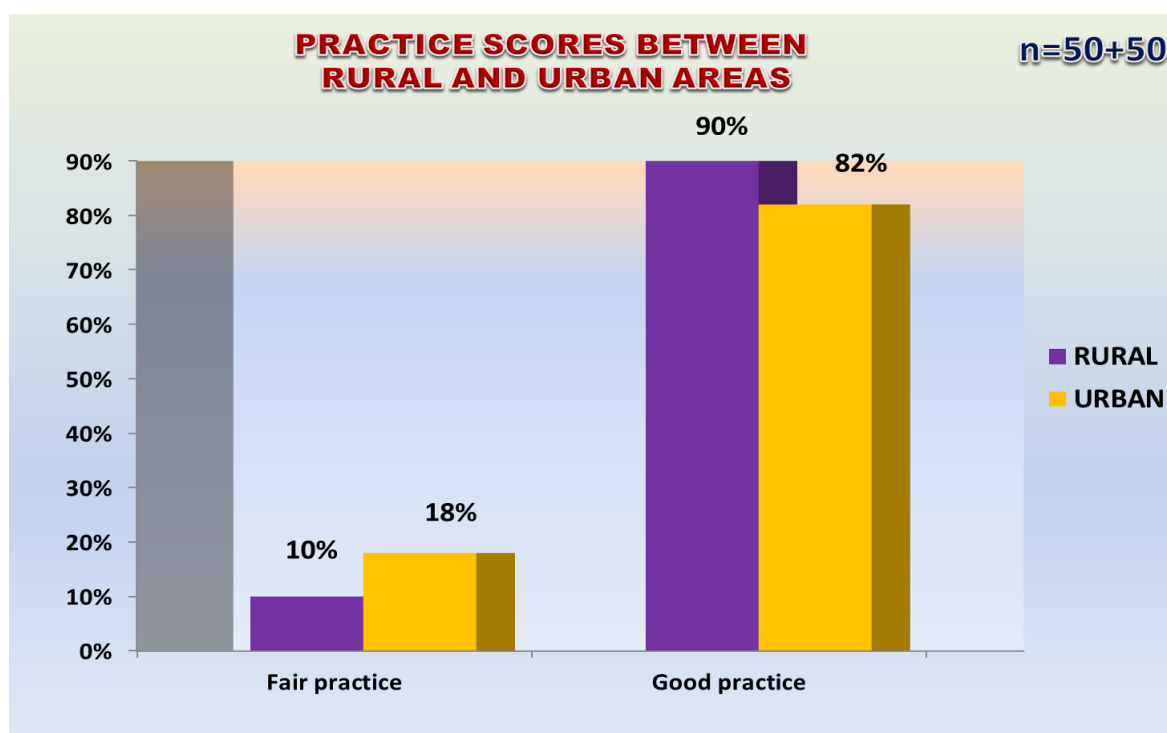
The data themselves do not provide the answers to research questions. Ordinarily the amount of data collected in a study is extensive to be reliably described in a study by were perusal. In order to obtain meaningful answers to the research questions, the data was presented and analyzed in order, so that relationship can be described. This section presents the analysis and interpretation of data collected from care givers of postnatal mothers to assess the knowledge, attitude and practice levels of caregivers regarding selected aspects of postpartum care. The data was organized, tabulated, analyzed and interpreted by using descriptive and inferential statistics.



The above figure revealed that comparison of knowledge levels of caregivers in rural area regarding selected aspects of postpartum care among 50, Majority of them 41(82%) had moderately adequate knowledge, 05(10%) had inadequate knowledge and 04(08%) had adequate knowledge. And about the comparison of knowledge levels of caregivers in urban area regarding selected aspects of postpartum care among 50, Majority of them 35(70%) had moderately adequate knowledge, 14(28%) had adequate knowledge and 01(02%) had adequate knowledge.



The above figure shows that comparison of attitude scores of 50 caregivers in rural area regarding selected aspects of postpartum care. 50 (100%) of them had favourable attitude, and none of them had moderately favourable and unfavourable attitude scores. And about the comparison of attitude scores of 50 caregivers in urban area regarding selected aspects of postpartum care. 50 (100%) of them had favourable attitude, and none of them had moderately favourable and unfavourable attitude scores.



The above figure shows that comparison of practice scores of caregivers in rural area among selected aspects of postpartum care among 50, majority of them 45 (90%) had good practice, 05(10%) had fair practice and no one had poor practice. And about the comparison of practice scores of caregivers in urban among selected

aspects of postpartum care among 50, majority of them 41 (82%) had good practice, 09(18%) had fair practice and no one had poor practice.

Table- 1: Difference between knowledge levels among caregivers of postnatal mothers in rural and urban areas regarding selected aspects of postpartum care. (n= 50+50)

Knowledge	Mean	Standard deviation	Mean difference	't' calculated value	't' Table value	Significance
RURAL	14.10	3.29	02.58	3.89	3.37	S*
URBAN	16.68	3.3				

S*- Significant- <0.001

The above table describe that the knowledge means of selected aspects of postpartum care among caregivers of postnatal mothers rural and urban areas were 14.10 and 16.68 respectively. Standard deviations were 3.29 and 3.3 respectively. The mean difference was 2.58

Table- 2: Difference between attitude scores among caregivers of postnatal mothers in rural and urban areas regarding selected aspects of postpartum care. (n= 50+50)

Attitude	Mean	Standard deviation	Mean difference	't' calculated value	't' Table value	Significance
RURAL	36.08	2.15	0.06	0.12	3.37	NS
URBAN	36.02	2.48				

S*- Significant- <0.001

The above table describe that the attitude means of selected aspects of postpartum care among caregivers of postnatal mothers rural and urban areas were 36.08 and 36.02 respectively. Standard deviations were 2.15 and 2.48 respectively. The mean difference was 0.06

Table- 3: Difference between practice scores among caregivers of postnatal mothers in rural and urban areas regarding selected aspects of postpartum care. (n= 50+50)

Practice	Mean	Standard deviation	Mean difference	't' calculated value	't' Table value	Significance
RURAL	10.08	1.34	0.02	0.05	3.37	NS
URBAN	10.10	2.16				

S*- Significant- <0.001

The above table describe that the practice means of selected aspects of postpartum care among caregivers of postnatal mothers rural and urban areas were 10.08 and 10.10 respectively. Standard deviations were 1.34 and 2.16 respectively. The mean difference was 0.02

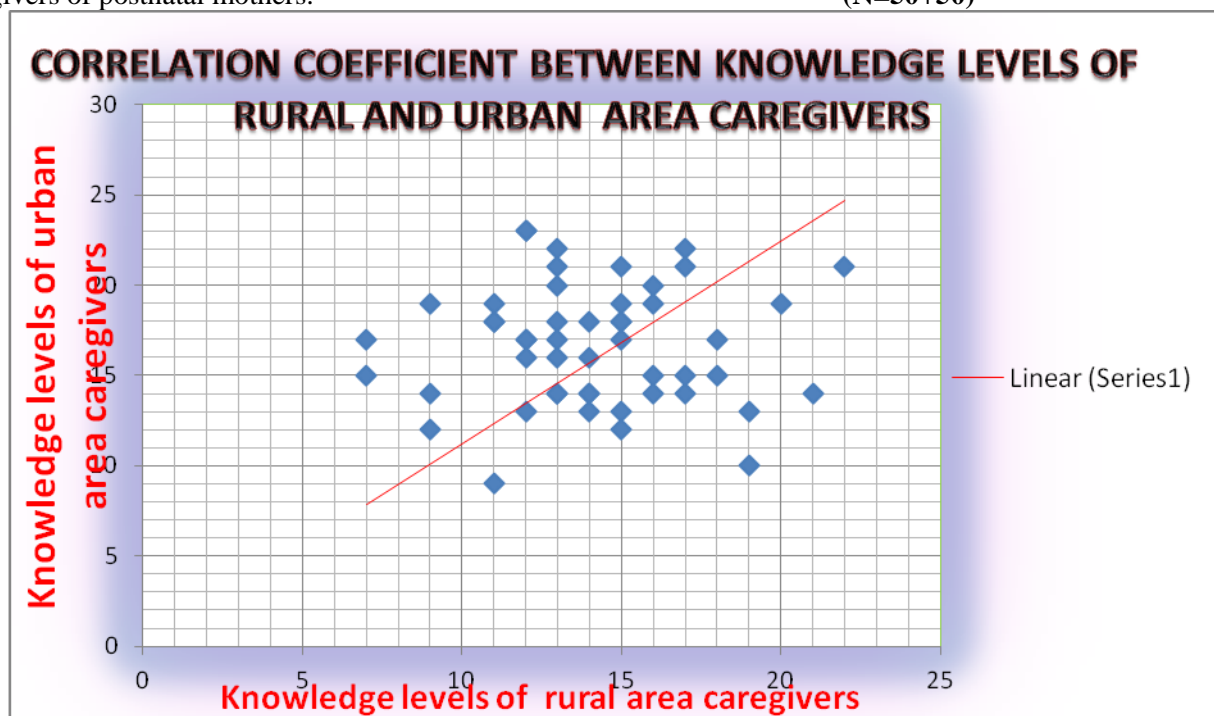
Table-4: THIS SECTION DEALS WITH THE CORRELATION AND COEFFICIENT OF KNOWLEDGE, ATTITUDE AND PRACTICE SCORES OF CAREGIVERS OF POSTNATAL MOTHERS BETWEEN RURAL AND URBAN AREAS. (N=50+50)

VARIABLES	Correlation coefficient calculated values of rural and urban areas	Correlation coefficient table value	significant
Knowledge	0.016	0.205	NS
Attitude	0.149	0.205	NS
Practice	0.115	0.205	NS

NS: Non significant df: (N-2) = 98S*: Significant at $p < 0.05$

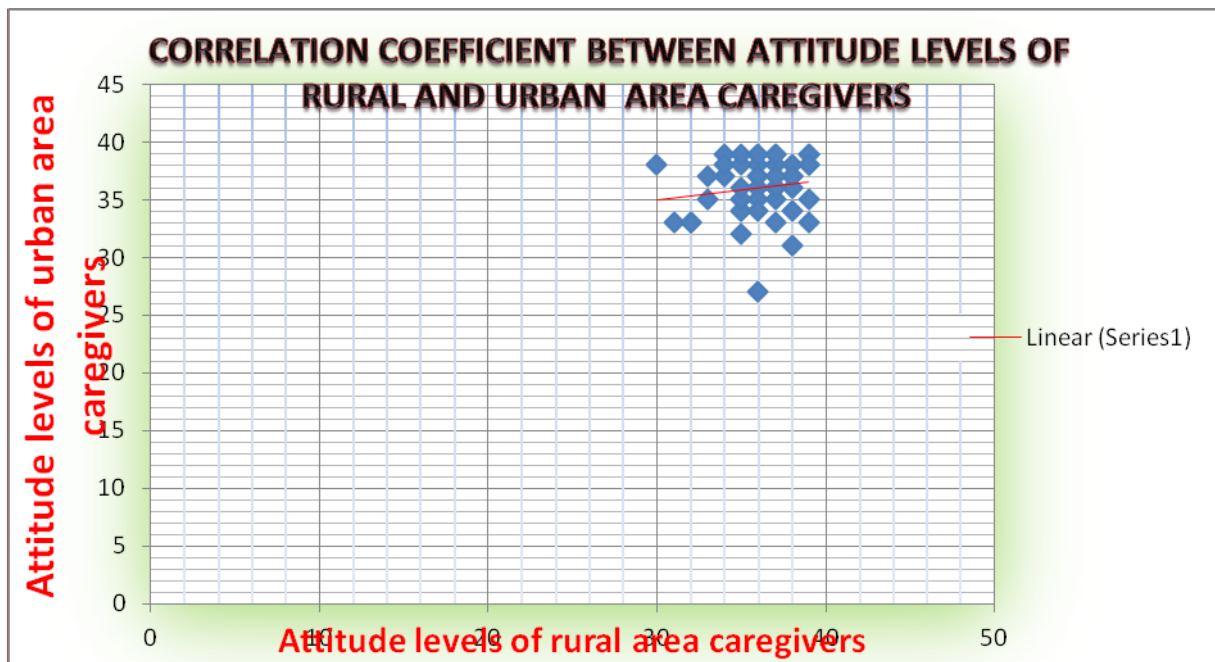
Moderately positive correlation ($0 < r < 1$)

There was non-significant correlation between rural and urban areas knowledge, attitude and practice levels of care givers of postnatal mothers. Hence the calculated 'r' value of knowledge scores of rural and urban areas is 0.016, attitude levels were 0.149 and practice levels were 0.115 is less than the table value 'r' value 0.273. It shows that there is no statistical significance between rural and urban areas attitude and practice levels among the caregivers of postnatal mothers. (N=50+50)



Significant at $p < 0.05$

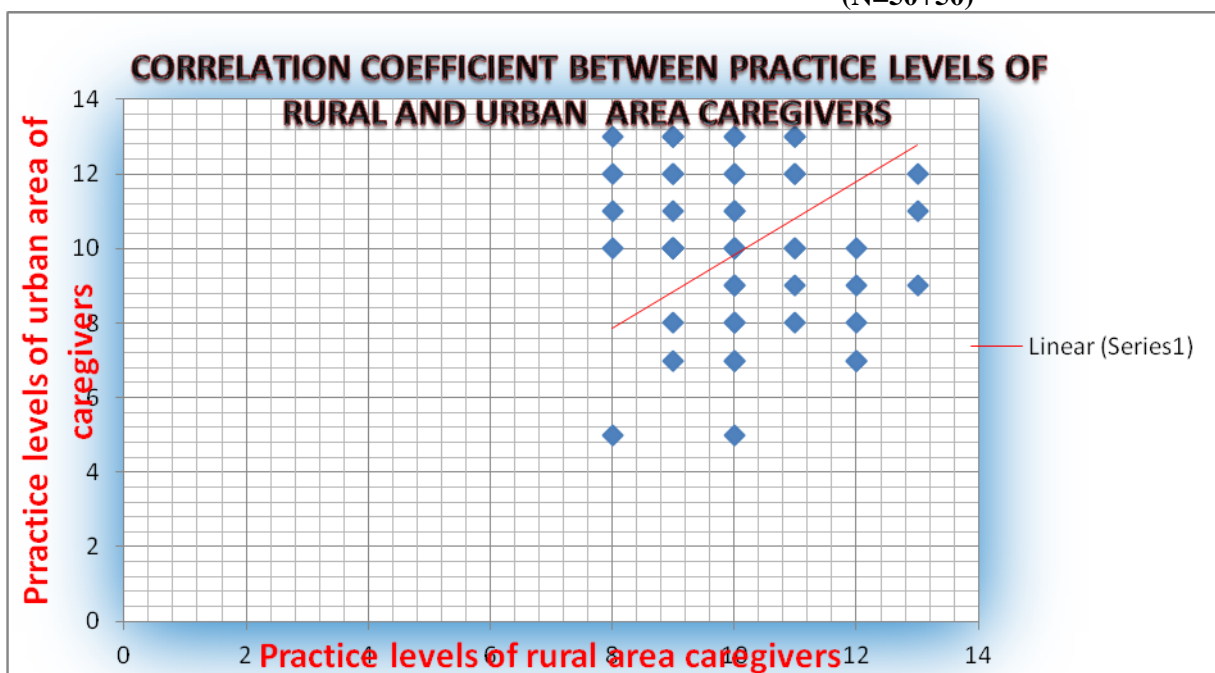
Fig 04: Correlation coefficient between knowledge levels of caregivers of postnatal mothers in rural and urban area (N=50+50)



Significant at $p < 0.05$

Fig 05: Correlation coefficient between attitude levels of caregivers of postnatal mothers in rural and urban area

(N=50+50)



Significant at $p < 0.05$

Fig 06: Correlation coefficient between practice levels of caregivers of postnatal mothers in rural and urban area

V. DISCUSSION

OBJECTIVE-I: Deals with the frequency and percentage distribution of socio-demographic variables of caregivers.

- Related to distribution of caregivers regarding age in rural area among 50, majority of them 22 (44%) were in the age group between 31 to 40 years, 20 (40%) were between 41 to 50 years and 08 (16%) were in 21 to 30 years. Where as in urban area among 50, majority of them 25 (50%) were in the age group between 31 to 40 years, 13 (40%) were between 21 to 30 years and 12 (24%) were in 41 to 50 years.
- Regarding distribution of caregivers regarding religion in rural area among 50, majority of them 33(66%)

were Hindus, 13 (26%) were Christians, 03 (6%) were Muslims and only 01 (2%) were others. Where as in urban area, majority of them 34(68%) were Hindus, 11 (22%) were Christians, 04 (8%) were Muslims and only 01 (2%) were others. It shows that almost same distribution is found in both the areas.

- In related to distribution of marital status of caregivers in rural area among 50, majority of them 48 (96%) were married and only 02 (4%) were unmarried. Where as in urban area among 50, majority of them 44 (96%) were married and only 01 (2%) were unmarried.
- Regarding distribution of caregivers regarding educational status in rural area among 50, majority of them 27 (54%) were non-literate, 13 (26%) had primary education, 09 (13%) had secondary education and only 01 (02%) had graduation and above where as in urban area among 50, majority of them 24 (48%) were non-literate, 19 (38%) had primary education 06 (12%) had secondary education and only 01 (02%) had graduation and above.
- Related to distribution of caregivers regarding occupation in rural area among 50, majority of them 30 (60%) are home makers, 13 (26%) are daily wagers, 05 (10%) are private employees and 02 (4%) are government employees. Where as in urban area among 50, majority of them 31 (62%) are home makers, 09 (18%) are private employees, 08 (16%) are daily wagers and 02 (4%) are government employees.
- Regarding distribution of caregivers regarding income per month among 50, majority of them 25 (50%) were earning Rs 5001-8000, 21 (30%) were earning Rs >10000 and only 04 (20%) were earning to Rs <5000. Where as in urban area among 50, majority of them 24 (48%) were earning Rs 5001-8000, 18 (36%) were earning Rs >10000 and 08 (16%) were earning Rs <5000.
- Related to distribution of caregivers regarding experience of providing postpartum care in rural area among 50, majority of them 30(60%) were 2-3 years, 14 (28%) were 0-1 years, and 06 (12%) are >3years. Where as in urban area among 50, majority of them 22(44%) were 0-1 years, 17 (34%) were 2-3 years, and 11 (22%) are >3years.
- Regarding distribution of caregivers in rural according to source of information regarding selected aspects of postpartum care, majority of them 49 (98%) were getting information from family members, relative and friends, only 01 (2%) were information getting from mass media, and there are no one get information from health care personnel. Where as in urban area among 50, majority of them 48 (96%) were getting information from family members, relative and friends, 01 (2%) were information getting from mass media, and only 01 (2%) information from health care personnel.

OBJECTIVE -II: To assess the levels of knowledge, attitude and practice scores regarding selected aspects of postpartum care among caregivers of postnatal mothers.

OBJECTIVE -III: To compare the levels of knowledge, attitude and practice scores regarding selected aspects of postpartum care among care givers in rural and urban areas.

- About comparison of knowledge levels of caregivers (RURAL) regarding selected aspects of postpartum care among 50, Majority of them 41(82%) had moderately adequate knowledge, 05(10%) had inadequate knowledge and 04(08%) had adequate knowledge. And about the comparison of knowledge levels of caregivers (URBAN) regarding selected aspects of postpartum care among 50, Majority of them 35(70%) had moderately adequate knowledge, 14(28%) had adequate knowledge and 01(02%) had adequate knowledge.
- Related to the knowledge means of selected aspects of postpartum care among caregivers of postnatal mothers rural and urban areas were 14.10 and 16.68 respectively. Standard deviations were ± 3.29 and ± 3.3 respectively. The mean difference was 2.58.
- Regarding comparison of attitude scores of 50 caregivers regarding selected aspects of postpartum care. 50 (100%) of them had favourable attitude, and none of them had moderately favourable and unfavourable attitude scores. And about the comparison of attitude scores of 50 caregivers regarding selected aspects of postpartum care. 50 (100%) of them had favourable attitude, and none of them had moderately favourable and unfavourable attitude scores.
- Related to the attitude means of selected aspects of postpartum care among caregivers of postnatal mothers rural and urban areas were 36.08 and 36.02 respectively. Standard deviations were ± 2.15 and ± 2.48 respectively. The mean difference was 0.06
- Related to comparison of practice scores of caregivers (rural) among selected aspects of postpartum care among 50, majority of them 45 (90%) had good practice, 05(10%) had fair practice and no one had poor practice. And about the comparison of practice scores of caregivers (urban) among selected aspects of postpartum care among 50, majority of them 41 (82%) had good practice, 09(18%) had fair practice and no one had poor practice.
- Related to the practice means of selected aspects of postpartum care among caregivers of postnatal mothers

rural and urban areas were 10.08 and 10.10 respectively. Standard deviations were ± 1.34 and ± 2.16 respectively. The mean difference was 0.02.

- The unpaired 't' calculated value regarding knowledge was 3.89, which is more than table value (3.37) at $p < 0.001$ level. The unpaired t-test has statistically proved that H_1 is accepted.
- Regarding attitude and practice unpaired 't' calculated values are 0.12 and 0.05 respectively, which is less than table value (3.37) at $p < 0.001$ level. The unpaired t-test has statistically proved that H_1 is rejected.

OBJECTIVE – IV: To correlate the knowledge, attitude and practice levels of caregivers of postnatal mothers in rural and urban areas.

- There was no significant correlation coefficient between rural and urban area care givers of postnatal mothers knowledge levels, attitude and practice scores. Hence the calculated 'r' value of knowledge, attitude and practice scores of rural and urban areas are 0.016, 0.149 and 0.115 respectively and which is lesser than the table 'r' value 0.205. It shows that there is no statistical significance correlation coefficient between rural and urban areas.

OBJECTIVE – V: To find out the association between knowledge, attitude and practice scores regarding postpartum care among caregivers of postnatal mothers with their selected socio-demographic variables.

- Since expected values are less than 5. Hence, chi-square cannot be calculated. So proportions are calculated for demographic variables.
- Related to hypothesis-2 researcher said that there is no significant difference between levels of knowledge, attitude and practice scores regarding selected aspects postpartum care among caregivers of postnatal mothers with their selected socio demographic variables. Hence H_2 is rejected.

OBJECTIVE – VI: To develop and distribute an information booklet regarding selected aspects of postpartum care to caregivers of postnatal mothers.

Information booklet on selected aspects of postpartum care includes definition, causes, risk factors, effects, prevention and problems, to enhance knowledge and develop positive attitude good practice among caregivers of postnatal mothers regarding selected aspects of postpartum care.

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