

**ORIGINAL RESEARCH**

# Assessment of utilisation and barriers of non-utilisation of integrated child development services among women in urban slums of srikakulam

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**ABSTRACT**

**Introduction:** The Integrated child development scheme was launched in 1975 to provide an package of services to aid the development of child. Children below age of 6 years, pregnant and lactating women of age group of 15-45 years are the beneficiaries who avail the various services under the scheme.

**Objectives**

- 1) To assess utilization of ICDS services among women.
- 2) To assess barriers of non-utilization of ICDS services among women.

**Materials and Methods:** A cross sectional study was conducted among women attending anganwadi centres in the urban field practice area of a medical college. Convenient sampling method was used to collect data. Telephonic interview was done with a structured and validated questionnaire. Verbal consent was taken. Data entered in Microsoft excel and analyzed through frequency and percentage. **Results:** Among 143 participants, 14.63% were pregnant women, 24.47% were lactating mothers and 73.43% of participants utilized the services under ICDS. Among those not utilized, the barriers were due to COVID-19(52.63%), Convent (44.73%), lack of knowledge(2.63%) and lack of interest of family members(2.63%). **Conclusion:** Majority of the participants utilized the ICDS services at Anganwadi center and the barriers for nonutilization need to be addressed through effective administrative scale up and community participation.

**Key words:** Anganwadi worker, ICDS, utilization, barriers

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**INTRODUCTION**

The Integrated Child development scheme was launched in 1975 to provide an integrated package of services to aid the holistic development of child. Children below age of 6 years, pregnant and lactating women of age group 15-45 years are the beneficiaries<sup>1</sup>. The scheme aims to improve the nutritional and health status of vulnerable groups through package of services which includes supplementary nutrition, preschool non formal education, nutrition and health education, immunization, health checkup and referral services<sup>2</sup>. It is a multi-sectoral program and the services are coordinated at village, block, district, state and central government levels and are provided through community based anganwadi centres<sup>1</sup>.

Poverty, poor environmental sanitation, diseases, infections, inadequate access to primary health care, inappropriate child rearing, feeding practices are some of the contributory factors which hinder or delay child's physical and mental development<sup>3</sup>. The mother is the key person in promoting child's well-being. Health care professionals, family members, neighbours and mass media provide information to mother regarding child care<sup>4</sup>. Due to scant literature in urban slum area of Srikakulam, this study will be conducted to assess the utilization and barriers of non-utilization of ICDS services among women for the benefit and children.

## OBJECTIVES

- 1) To assess the utilization of ICDS services among women.
- 2) To assess barriers of non-utilization of ICDS services among women.

## MATERIALS AND METHODS

**STUDY DESIGN:** Cross sectional study.

**STUDY SAMPLE:**All women attending anganwadi centres.

**SOURCE OF SAMPLE:**Anganwadi centres near UHTC field practice area of a medical college.

**STUDY DURATION:**December 2022 to April 2023.

**SAMPLE SIZE:**143.

**SAMPLING METHOD:**Convenient sampling.

Ethical approval was obtained from Institutional Ethics Committee and due permissions were obtained from Project Director and Community development project officer (CDPO).List of women attending 22 anganwadi centres was obtained from anganwadi workers.All the women (pregnant, lactating, women with children <6 years) registered in the Anganwadi centres were included in the study and those who did not respond to multiple (more than twice) calls or did not give consent were excluded from the study.Of the 188 registered participants it was possible to contact only 143 of them which constituted the study sample. Demographic details and other information was collected through telephonic interview with the help of a structured and validated questionnaire which consisted of 42 questions. Audio recorded verbal consent was taken from the participants after explaining the purpose of the call and ensuring data confidentiality. The questionnaire was translated into Telugu language by language experts. The actual interview went on for 10 minutes each in Telugu language starting with introduction followed by questions on utilisation and barriers for non utilisation of the scheme.

Each participant was given a unique identification number and data was entered in Microsoft excel. Descriptive statistics like frequency and percentage were used for analysis.

## RESULTS

Of the 188 registered cases, it was possible to contact only 143 participants after considering the inclusion and exclusion criteria, thus leading to 23.94% non-response rate. The socio-demographic data showed that majority (61%) of women are in the age group of 18-25 years and all of them were married (100%). A total of 54% completed their graduation/post-graduation and 2.30% of them were unemployed. Sixty seven percent of them belonged to joint family and 78.32% of them were Hindus.(Table 1)

In this study,21 (14.68%) participants were pregnant women, 35 (24.47%) were lactating mothers, 87 (60.83%) were mothers who had children less than 6 years. (Figure 1)

The services under the scheme were utilised by 73.43% of participants and 26.57% of participants did not utilise the services due to barriers.(Figure 2)

## SERVICES FOR ANTENATAL MOTHERS

All the antenatal mothers (100%) utilized anganwadi for early registration of pregnancy, 57.14% of them utilised anganwadi for antenatal check-up, 85.71% of them check their height and weight in anganwadi, 90.47% of ANC mothers take education on antenatal diet in anganwadi. All the ANC mothers (100%) take supplementary nutrition from anganwadi, 76.19% of them received information on danger signs of pregnancy, 85.71% of them received information regarding referral services, 95.23% of ANC mothers take TT immunization in anganwadi, 80.95% of them take iron and folic acid tablets from anganwadi. Sixty six percent of ANC mothers were motivated for institutional delivery by anganwadi worker, 9.52% of them received cash benefit from anganwadi.(Figure 3)

## SERVICES FOR CHILDREN UPTO 6 YEARS

All the mothers(100%) who had children upto 6 years utilised anganwadi for immunization of their child and have their child's height and weight measured(100%), 97.91% of them have their child's development assessed and reported by anganwadi worker, 100% of mothers utilize supplementary nutrition from anganwadi for the child, 43.75% of mothers utilize Vitamin A dose for the child, 18.75% utilize anganwadi for ORS, 47.91% mothers take deworming medicine from anganwadi, 54.16% of mothers stated that their children received non-formal education from anganwadi.(Figure 4)

## SERVICES FOR LACTATING MOTHERS

Eighty two percent of lactating mothers receive assistance for breast feeding by anganwadi worker, 74.28% have got health education for complimentary feeding, 85.71% of mothers visit anganwadi for weight assessment, 100% of mothers take supplementary nutrition from anganwadi, 40% of them take iron, folic acid and calcium tablets from anganwadi, only 20% get cash benefits under Janani suraksha yojana.(Figure 5)

## BARRIERS FOR NON UTILIZATION

Among 143 participants, 52.63% of them were not utilizing the services due to COVID-19, 44.73% of them did not utilize the services due to studying in convent, 2.63% of them did not utilize due to lack of knowledge and 2.63% did not utilize the services as the family members were not interested.(Figure 6)

## DISCUSSION

The present study states that 73.43% of the participants (pregnant, lactating and mothers of children <6 years) utilised the ICDS services from anganwadi and 26.57% of them did not utilize the services due to barriers. Another study done by

Chudasama RK *et al.*, showed that a majority of pregnant (94.7%) and lactating mothers (74.4%) availed the ICDS services<sup>5</sup>.

In the present study, 57.14% ANC mothers utilised antenatal checkup, 100% of them receive supplementary nutrition, 80.95% receive iron, folic acid and calcium tablets from anganwadi. All the mothers (100%) utilize anganwadi for child's immunization, 95.83% of them get supplementary nutrition, 18.75% of them utilize anganwadi for ORS, 54.16% of them received non formal education. Eighty two percent of lactating mothers received assistance for breast feeding by anganwadi, 74.28% of them have got health education for complimentary feeding, 14.28% of them don't visit anganwadi for weight assessment, 80% of them have not received cash benefit from anganwadi.

In a study by Kadam S *et al.*, it was found that 82.9% of ANC mothers utilize antenatal checkup, 95% of them receive supplementary nutrition, 75.7% of them receive iron, folic acid and calcium tablets from anganwadi. Ninety two percent of mothers utilize anganwadi for child's immunization, 96.4% of mothers receive supplementary nutrition from anganwadi, 84.3% of mothers utilize anganwadi for ORS, 100% of children received non formal education after 3 years of age. Eighty five percent of lactating mothers received assistance for breast feeding, 5% of mothers have got health education for complimentary feeding, 17.1% of mothers don't visit anganwadi for weight assessment, 52.9% of mothers have not received cash benefit from anganwadi<sup>2</sup>.

Kartik Sudhakar Patil *et al.*, reported 77.48% utilization of ICDS services. Sixty eight percent of antenatal mothers don't utilize immunization and health checkup services, 62.5% did not take supplementary nutrition and 81.25% did not attend educational programs. Only 38.46% nursing mothers received health education and supplementary nutrition<sup>6</sup>. In present study, 97.91% of mothers were reported about their child's growth and development. In a study done by Biswas *et al.*, in two districts of West Bengal showed growth chart was not discussed with 87.5% mothers<sup>7</sup>. The study done in Kolkata revealed growth chart was discussed with 31.9% mother and 4.4% received medicine from Anganwadi centre<sup>8</sup>. In a study done in Kolkata it was revealed that 9.6% of mothers said meeting was held regularly in their location<sup>8</sup>.

In the present study, 52.63% were not utilizing the services due to COVID-19, 44.73% of them did not utilize due to studying in convent, 2.63% of them did not utilize due to lack of knowledge and 2.63% did not utilize the services as the family members were not interested. In a study done by Kadam S *et al.*,

52.85% were influenced by accessibility of services related factors like distance far away from anganwadi, irregular supply, no availability of vehicle. Quality and preference related factors like lack of quality of services, using private hospital services, not necessary of anganwadi services influenced 63.57% of them. Information and awareness related factors like lack of detailed information about anganwadi services influenced 50% of them<sup>2</sup>.

Another study by Jawahar Preethy *et al.*, showed that 43% stated household work, 40% stated longer distance and 13% lacked awareness about anganwadi services<sup>1</sup>. Kartik Sudhakar patil *et al.*, stated that 24% household work, 4% irregular supply of supplementary nutrition, 28% lack of awareness, 11% behaviour of anganwadi worker, 18% said no need of benefits, 15% of mothers gave another reasons for non-utilization of anganwadi services<sup>6</sup>. Davey A *et al.*, found out that not easy accessibility of AWC and less space available at AWC (68.6%), followed by poor quality of food distributed (66.7%) and irregular preschool education (57.1%) from AWCs<sup>9</sup>. In a study done by Kapil V *et al.*, difficulties in carrying the child to anganwadi centres and inadequate contact of anganwadi workers with the mother<sup>10</sup>.

## CONCLUSION

The Integrated child development scheme is a globally recognized community programme based on early child care which addresses the basic inter related needs of young children, antenatal and lactating mothers in a holistic manner. Majority of the participants utilized the ICDS services at Anganwadi center and the barriers for non-utilization need to be addressed through effective administrative scale up and community participation. Attention of health and ICDS authorities is needed and more efforts should be given to total utilization of services among mothers and children.

## STRENGTHS

Cost effective and feasible

## LIMITATIONS

Lack of face to face interaction and lack of depth while collecting data

## FUNDING

No funding sources

## CONFLICT OF INTEREST

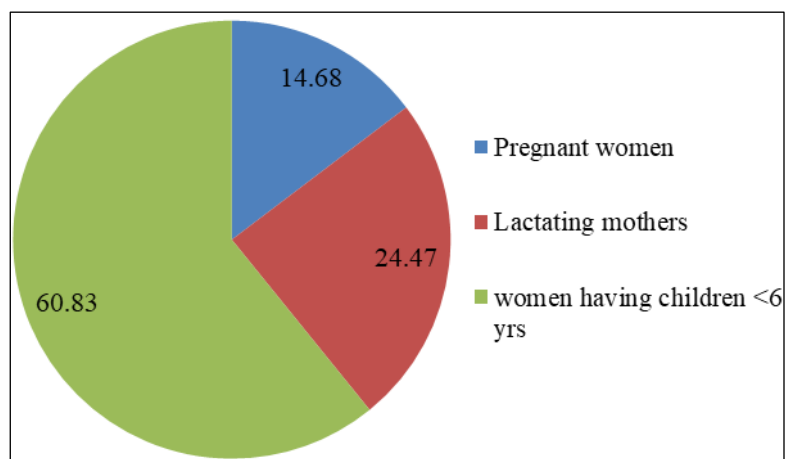
None declared.

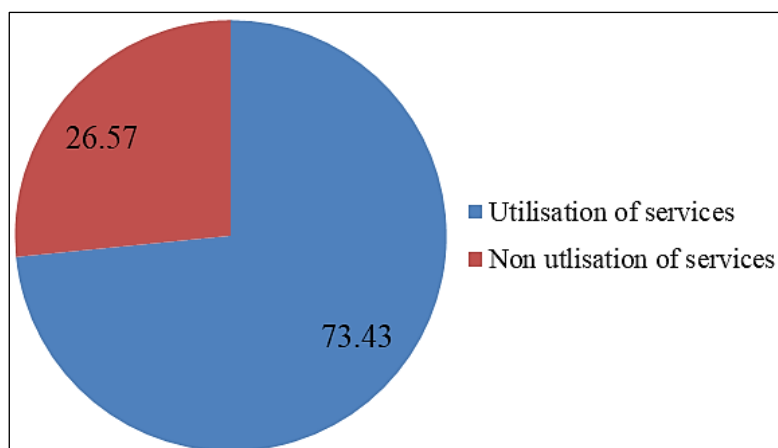
## ACKNOWLEDGEMENTS

None.

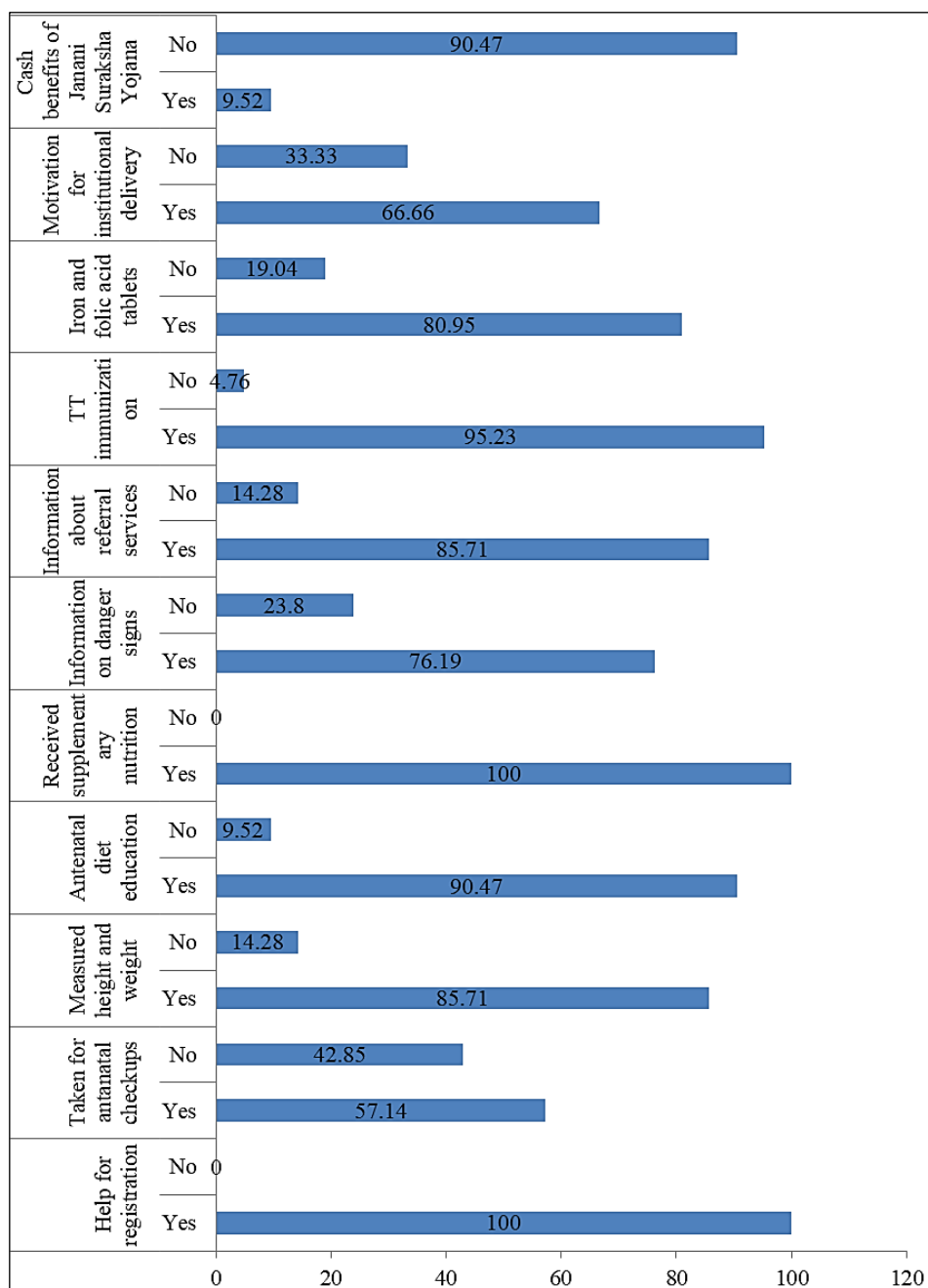
**Table 1: Frequency and percentage distribution of selected demographic variables (n=143)**

		Frequency	Percentage
1.	<b>Age in years</b>		
a.	18-25	61	42.65
b.	26-30	49	34.26
c.	31-35	26	18.18
d.	36-40	5	3.49
e.	41-45	1	0.69
2.	<b>Marital status</b>		
a.	Married	143	100
b.	Unmarried	0	0
3.	<b>Education</b>		
a.	Profession/honours	0	0
b.	Graduate/Post graduate	54	37.76
c.	Inter/post high school diploma	19	13.28
d.	High school certificate	37	25.87
e.	Middle school certificate	27	18.88
f.	Primary school certificate	0	0
g.	Illiterate	5	3.49
4.	<b>Occupation</b>		
a.	Profession/honour	3	2.09
b.	Semi-profession	2	1.39
c.	Clerical,shop owner, farmer	2	1.39
d.	Skilled worker	1	0.69
e.	Semi-skilled worker	1	0.69
f.	Unskilled worker	1	0.69
g.	Unemployed	132	92.30
5.	<b>Type of family</b>		
a.	Nuclear	45	31.46
b.	Joint	97	67.83
6.	<b>Religion</b>		
a.	Christian	2	1.39
b.	Hindu	112	78.32
c.	Muslim	26	18.18
d.	Others	2	1.39

**Fig 1: Pie diagram showing percentage distribution of women based on type of beneficiaries (n=143)**



**Fig 2: Pie diagram showing Percentage distribution of utilization and non-utilization of services(n=143)**



**Fig 3: Bar graph showing the percentage of utilization of ICDS services by pregnant women (n=21)**

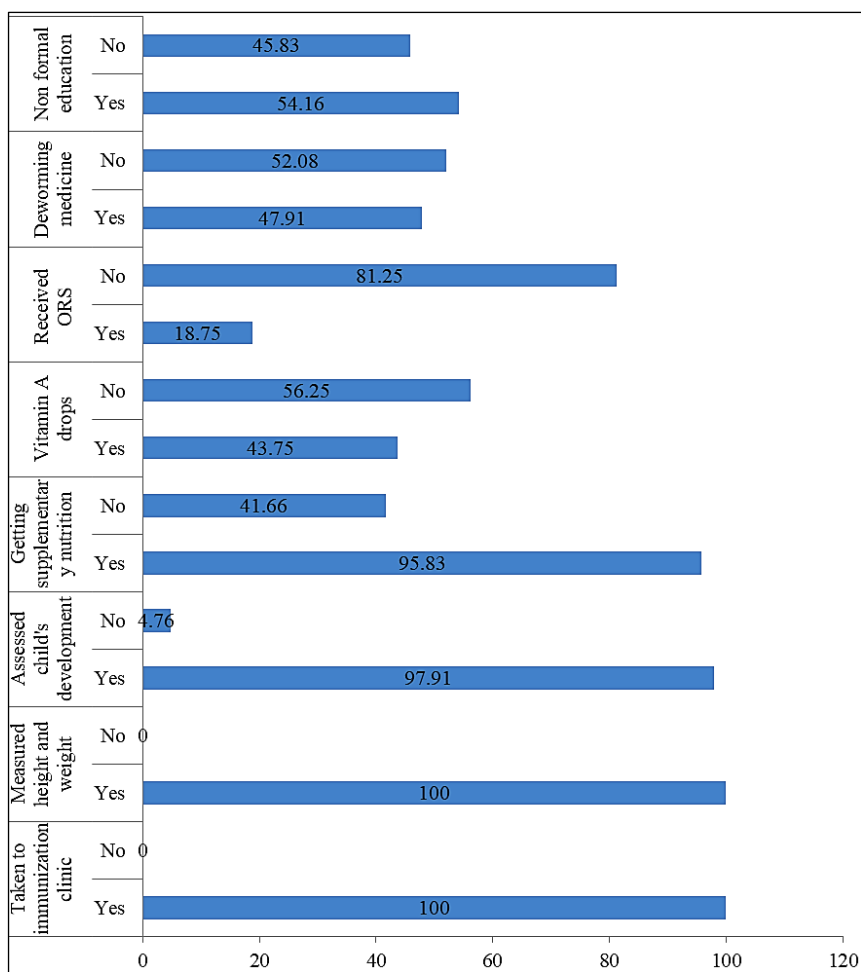


Fig 4: Bar graph showing percentage distribution of utilization of ICDS services by children<6yrs (n=87)

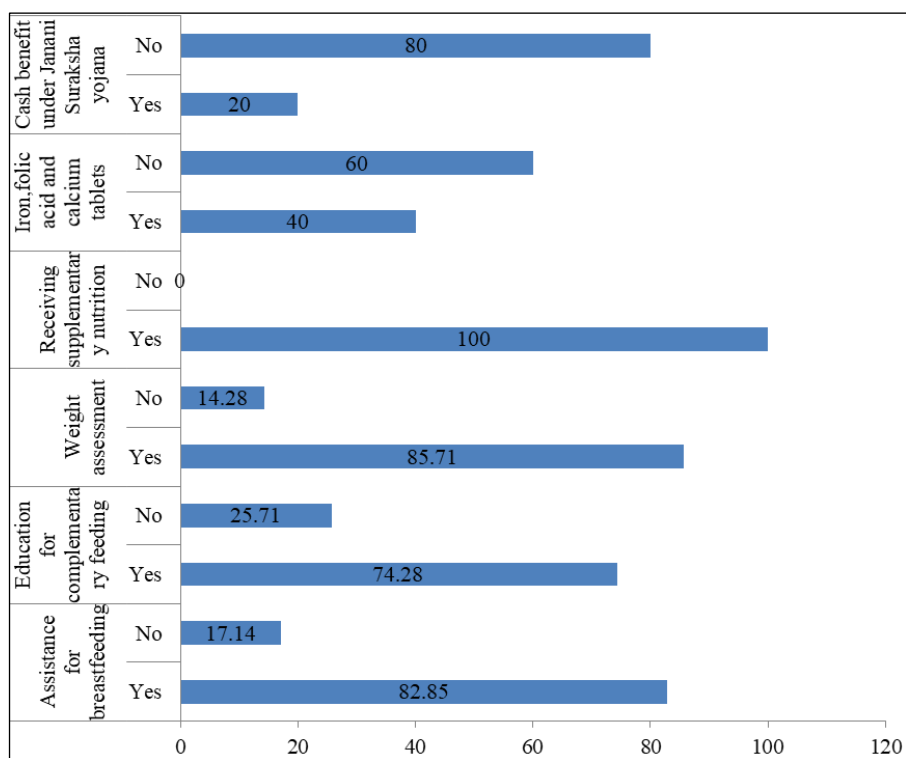
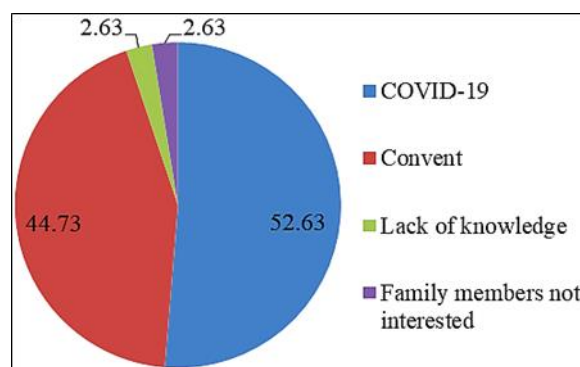


Fig 5: Bar graph showing percentage of utilisation of ICDS services by lactating mothers (n=35)



**Fig 6: Pie diagram showing percentage distribution of barriers for non-utilization of ICDS services among the participants (n=143)**

## REFERENCES

1. P.Jawahar, S.A.Raddi. Assess the knowledge, utilization, level of satisfaction of utilization and barriers of non-utilization regarding integrated child development services among women of Ernakulam district, Kerala, India. *Clinical epidemiology and global health* 2021;12:100815
2. Sudaivi K, Sunil K. Assess the knowledge and factors influencing utilization of services provided by Anganwadi workers among mothers attending selected anganwadis 2020;7, 15: 4366-4374
3. Kumar D, Goel NK, Kallia M, Swami HM, Singh R. Gap between awareness and practice regarding maternal and child health among women in a urban slum community. *Indian J Pediatr* 2008 May 1;75(5): 455-458
4. Datta V, John R, Singh VP, Chaturvedi P. Maternal knowledge, attitude and practices towards diarrhea and oral rehydration therapy in rural Maharashtra. *Indian J Pediatr* 2001 Nov 1;68 (11):1035-1037
5. Chudasama RK, Patel UV, Kadri AM, Mitra A, Thakkar D, Oza J. Evaluation of integrated child development services program in Gujarat, India for the years 2012 to 2015. *Indian J Public Health* 2016 Apr 1;60(2):124
6. Patil KS, Kulkarni MV. Knowledge and utilization of integrated child development services (ICDS) scheme among women in a urban slum-a community based study. *Indian Journal of Forensic and Community Medicine* 2017 Jan 15; 3(4):267-71
7. Biswas AB, Das DK, Roy RN, Saha I, Shrivastava P, Mitra K. Awareness and perception of mother about functioning and different services in two districts of West Bengal. *Indian J Public Health* 2010;54(1):33-5
8. Ram PV, Dasgupta A, Pal J, Parthasarathi R, Biswas R, Naiya SA. A cross sectional study on client satisfaction of anganwadi centres under integrated child development services (ICDS) scheme in a slum of Kolkata. *National J Community Med* 2014;5(1):88-92
9. Davey A, Davey S, Datta U. Perception regarding quality of services in urban ICDS blocks in Delhi. *Indian J Publ Health* 2008 Jul 1;52(3):156-158
10. Kapil V, Nayar D, Nandan D. Reasons of underutilization of integrated child development services by children under three years of age. *Indian J Matern Child Health* 1996;7(4):102-103