**Empowering Rural Communities: Assessing Anganwadi Workers' Knowledge in Health and Education**

**ABSTRACT**

Empowering rural communities through effective health and education services is crucial for improving the overall well-being and development of the marginalized populations. *Anganwadi* workers play a pivotal role in delivering the services at the grassroots level in India. The aim of the present study was to assess the knowledge of *Anganwadi* workers in addressing health and education needs within rural communities. The study was conducted in two blocks of Hisar district in Haryana state. A sample of 100 *Anganwadi* workers was selected randomly by covering 10 villages. The research employed a mixed-methods approach, combining surveys and interviews with *Anganwadi* workers in diverse rural settings. It was found that the majority of *Anganwadi* workers had knowledge of developmental activities (84.40%), immunization (90.00%) and nutritional requirements for pregnant and lactating women (67.43%) and low knowledge of anthropometric measurements (30.75%). The study also revealed that knowledge was negatively correlated with age and working experience. This assessment helped gauge their capacity to provide accurate information and support to the community. The research findings had practical implications for policymakers, organizations and stakeholders involved in early childhood development and maternal health programs. By studying the profile, facility and knowledge of *Anganwadi* workers, this research contributes to the existing body of knowledge, addressing the strengths, challenges and areas for improvement within the workforce. Ultimately, the aim is to enhance the quality of services provided by *Anganwadi* workers and promote the holistic well-being of children and mothers in the community.

**Keywords:** *Anganwadi* workers, Education, Knowledge, Health, Rural Community.

**INTRODUCTION**

The *Anganwadi* workers (AWW) is the community based voluntary frontline worker of the Integrated Child Development Scheme (ICDS ) programme. Selected from the community, she assumes a pivotal role due to her close and continuous contact with the beneficiaries (Bhimani *et al.,* 2020). The output of ICDS scheme is to a great extent dependant on the profile of the key functionary i.e. the AWW, her qualification, experience, skills, attitude, training etc. (Jena, P. 2013; Sharma *et al., 2014*). An *Anganwadi* is the focal point for delivery of ICDS services to children and mothers. An *Anganwadi* normally covers a population of 1000 in both rural and urban areas (Patil *et al., 2013;* Gautam *et al.,* 2019). Services at *Anganwadi* centre (AWC) are delivered by an *Anganwadi* worker, who is a part-time honorary worker (Manhas et al., 2012). She is a woman of same locality, chosen by the people, having educational qualification of middle school or matric or even primary level in some areas. She is assisted by a helper who is also a local woman and is paid an honorarium (Kachhot, *et al.,* 2023; Shukla, P. 2013).

*Anganwadi* workers have nutritional knowledge, but no correct knowledge and perception for promoting complementary food practices. So, it leads a critical gap between knowledge and practice of complementary feeding (Patel *et al.,* 2017). *Anganwadi* workers have knowledge about the flattened growth line on growth chart, have correct knowledge about the calories and proteins given to grade 4 malnourished child (Parikh and Sharma, 2011). The *Anganwadi* workers have also knowledge regarding reproductive health and it was significantly higher in slums area (Gautam, 2020). So, the aim of this study was to provide an in-depth analysis of their characteristics, resources, and expertise. By examining these aspects, researchers can gain valuable insights into the qualifications, training, responsibilities, and services provided by these dedicated individuals. The *Anganwadi* workers was a fundamental component of this study. It involves understanding the demographic composition, including factors such as age, gender, educational qualifications, job satisfaction and the process of selection within the community (Ghosh *et al.,* 2022). This examination helps assess the representativeness and diversity of the workforce, ensuring that the needs and cultural nuances of the community are adequately addressed. Facility evaluation is another crucial aspect of this study. It focuses on the physical infrastructure and resources available to *Anganwadi* workers. Assessing the adequacy of *Anganwadi* centres, transportation facilities, communication tools and access to basic amenities is vital to understanding the challenges they face and identifying areas where improvements can be made (Sharma and Jain, 2014). By providing sufficient facilities, policymakers can empower *Anganwadi* workers to carry out their responsibilities effectively. The findings from this study hold significant implications for policymakers, researchers and organizations involved in early childhood development and maternal health. By gaining insights into the profile, facility and knowledge of *Anganwadi* workers, stakeholders can make informed decisions to enhance training programs, improve infrastructure and tailor interventions to better meet the needs of the community.

The current study aims to provide a comprehensive understanding of the profile, facility and knowledge of *Anganwadi* workers. By studying these key aspects, will help in identify strengths, challenges and areas for improvement within the workforce, thereby contributing to the enhancement of early childhood development and maternal health initiatives in India.

**METHODOLOGY**

*Study area:* The current study was purposefully carried out in the Hisar district of the state of Haryana. Two randomly chosen blocks were taken from the chosen district. Adampur Mandi was the first block, and Hisar II was the second. Five villages, Siswal, Mhobatpur, Sadlpur, Bagla and Kabrel were chosen from Adampur Mandi. Neoli Kalan, Dobhi, Balsamand, Kirtan and Arya Nagar were the five randomly chosen villages from the second block. From the selected two blocks Hisar (II) and Adampur Mandi, the total 100 *Anganwadi* workers chosen randomly from selected villages. Personal data collection was conducted through the use of an interview schedule that included questions on the study's variables and objectives.

**RESULTS AND DISCUSSION**

**Background profile of the *Anganwadi* workers**

*Age of the respondent:*Distribution of respondents according to their age showed that 45 per cent the respondents belonged to 40-50 years of age group, followed by 30-40 years (27.00%) and 50-60 years (28.00%) respectively.

*Marital status:*Data about the marital status of respondents revealed that majority (77.00%) were married, 20 per cent were widows, 2 per cent were divorcee and 1 per cent were unmarried at the time of investigation.

*Family type and family size:* The data clearly showed that 53 per cent of the respondents had joint families and 47 per cent respondents had nuclear families. Half of respondents (52.00%) had small families whereas 32 per cent had medium and 16 per cent respondents had large families.

*Education qualification:* Data revealed that 38 per cent of the respondents were educated up to high school, 30 per cent were matriculate, 17 per cent were graduate, 9 per cent post graduate and only 6 per cent up to primary school. The nearby similar study was conducted by Joshi K. (2018) and that conclude that 45 per cent of *anganwadi* workers were educated up to secondary; while 34 per cent were educated up to higher secondary and only 3 per cent were post graduate.

*Caste:*The data indicated that 46 per cent respondents belonged to general caste, 36 per cent from other backward caste and 18 per cent from schedule caste.

*Income:*Income wise distribution showed that 47 per cent of the respondent’s annual family income was Rs. 1 lac-2 lacs, 33 per cent were Rs. 2 lacs-3 lacs and 20 per cent were from above Rs. 3 lacs.

*Land holding:*Twenty-seven per cent respondents had no land and the purpose of join *Anganwadi* is financial benefit, 41 per cent had 1 acre to 2.5 acres land holdings, 24 per cent had 2.5 acres to 5-acres land holdings and only 8 per cent had more than 5-acres land holdings and join *Anganwadi* for interest purpose not for money.

*Material possession:*Nine per cent of the respondents had low material possession, followed by medium material possession (72.00%) and 19 per cent respondents had high material possession.

*Work experience:*The respondents had good working experience. Forty-four per cent respondents had 10-20 years of experience. Most of the respondents joined in year 2011 and had more than 10 years of experience. Twenty-seven per cent had 0-10 years of experience, only 2 per cent of respondents had 1 year of experience. Seventeen per cent respondents had 30-40 years of experience and 12 per cent had 20-30 years of experience. It was found that 42 per cent worked between 11-15 years. In the study of Arya M *et al*., (2018) thirty-two per cent worked between 5-10 years and 26 per cent had served for more than 15 years. None of them were less than five years of experience which is similar to present study.

|  |  |  |  |
| --- | --- | --- | --- |
| **Table 1. Background profile of the *Anganwadi* workers**  (n = 100) | | | |
| S.No. | **Variable** | **Category** | **f (%)** |
| 1. | **Age (years)** | 30-40 | 27(27.00) |
| 40-50 | 45(45.00) |
| Above 50 | 28(22.00) |
| 2. | **Marital status** | Married | 77(77.00) |
| Unmarried | 1(1.00) |
| Divorced | 2(2.00) |
| Widowed | 20(20.00) |
| 3. | **Family type** | Nuclear | 47(47.00) |
| Joint | 53(53.00) |
| 4. | **Family size** | Small (up to 4 members) | 52(52.00) |
| Medium (up to 5-6 member) | 32(32.00) |
| Large (7 and above) | 16(16.00) |
| 5. | **Educational qualification** | Primary | 6(6.00) |
| High school | 38(38.00) |
| Intermediate | 30(30.00) |
| Graduate | 17(17.00) |
| Post graduate | 9(9.00) |
| 6. | **Caste** | General | 46(46.00) |
| OBC | 36(36.00) |
| SC | 18(18.00) |
| 7. | **Income** | 1lacs Rs. – 2 lacs Rs. | 47(47.00) |
| 2lacs Rs. – 3 lacs Rs. | 33(33.00) |
| Above 3lacs Rs. | 20(20.00) |
| 8. | **Land holding** | Landless | 27(27.00) |
| Less than 2.5 acre | 41(41.00) |
| 2.5-5 acre | 24(24.00) |
| More than 5acre | 8(8.00) |
| 9. | **Material possession** | Low (6-10) | 9(9.00) |
| Medium (11-15) | 57(57.00) |
| High (15-20) | 34(34.00) |
| 10. | **Work experience (in years)** | 1-10 | 27(27.00) |
| 11-20 | 44(44.00) |
| 21-30 | 12(12.00) |
| 31-40 | 17(17.00) |

**Information about *Anganwadi* centres:** The data in table 2 indicated that majority of the *Anganwadi*s (80.00%) had the population of 500-1000 and 20 per cent respondents had population of 1000-1500 peoples. Slightly more than half (56.00%) of the respondents’ distance of *Anganwadi* centres from their residences was 1-2 Km (30.00%) followed by 2-3 Km (8.00%) and above 3 Km (5.00%). In *Anganwadi*s where distance of *Anganwadi* was more than 1 Km, the respondents faced problems as they don’t have any conveyance to reach *Anganwadi* centres at time. The data showed that maximum distance from tehsil to *Anganwadi* was 10-20 Km for 66 per cent *Anganwadi* centres. Maximum distance from district to *Anganwadi* was 20-30 Km for 43 per cent *Anganwadi* centres. Out of hundred, 40 per cent respondents had up to 150 survey houses, 45 per cent had 150-200 houses, 13 per cent had 200-250 houses and 2 per cent of respondents had above 250 houses. Two per cent respondents had no helper because one *Anganwadi* centre had merged in mini *Anganwadi* centre and the other one was also included in merged *Anganwadi* centre. Majority (94.00%) of the *Anganwadi* centre had Pucca building and only 6 per cent had mixed building. Thus, it can be concluded that most of the respondents had surveyed population between 500-1000, having distance of *Anganwadi* centre from residence is up to 1 Km, from tehsil is 10-20 Km and from district is 20-30 Km. Majority of the respondents had 150-200 houses, having helper and the Pucca building.

|  |  |  |  |
| --- | --- | --- | --- |
| **Table 2. Information about *Anganwadi* Centres**  (n=100) | | |  |
| Sr.no | **Information about *Anganwadi* Centres** | **Category** | **f (%)** |
|  | **Population under survey** | 500-1000 | 80(80.00) |
| 1000-1500 | 20(20.00) |
|  | **Distance of AWCs from residence** | Up to 1Km | 57(57.00) |
| 1-2Km | 30(30.00) |
| 2-3Km | 8(8.00) |
| Above 3Km | 5(5.00) |
|  | **Distance from tehsil** | 0-10Km | 34(34.00) |
| 10-20Km | 66(66.00) |
|  | **Distance of AWCs from district** | Up to10Km | 9(9.00) |
| 10-20Km | 21(21.00) |
| 20-30Km | 43(43.00) |
| Above 30Km | 27(27.00) |
|  | **Total survey houses** | up to 150 | 40(40.00) |
| 150-200 | 45(45.00) |
| 200-250 | 13(13.00) |
| Above 250 | 2(2.00) |
|  | **Helper** | Yes | 98(98.00) |
|  | **Type of *Anganwadi*** | Kuccha | 0(0.00) |
| Pacca | 94(94.00) |
| Kuccha and pucca | 6(6.00) |

**Knowledge assessment of *Anganwadi* workers:** The *Anganwadi* workers were perform various activity like carried out development activity for the development and physical growth of the children, anthropological measurement, and immunization process and giving nutritional advice to the pregnant and lactating women. All the respondents (100.00%) possessed basic knowledge regarding physical and language developmental activities and followed by cognitive developmental (85.00%), emotional development (69.00%) and social developmental activities (88.00%). While assessing the knowledge of anthropological measurements it was found that cent per cent respondents possessed knowledge regarding height and weight measurements. Sixteen per cent respondents possess knowledge on waist and hip circumference measurements. Only 9 per cent and 5 per cent respondents had knowledge about knee height and head circumference measurements respectively. A similar study was conducted by Jadav (2022**)** and Parikh (2011) which reported that most of the *Anganwadi* workers had knowledge regarding anthropological measurements but it was found that performance as well as awareness among *Anganwadi* workers regarding the importance of growth charts and growth monitoring was not satisfactory. The other similar study of Kachhot (2023) conclude that only 17-30 per cent *Anganwadi* workers knew the correct waist and hip circumference for an optimally nourished child aged 2 and 4 years.

|  |  |  |
| --- | --- | --- |
| **Table 3. Knowledge assessment of *Anganwadi* workers**  (n =100) | | |
| Sr.no | **Knowledge of Developmental activity** | **f (%)** |
| 1. | Physical developmental activity | 100(100.00) |
| 2. | Cognitive developmental activity | 85(85.00) |
| 3. | Emotional developmental activity | 69(69.00) |
| 4. | Social developmental activity | 88(88.00) |
| 5. | language developmental activity | 100(100.00) |
|  | **Overall** | **88.4%** |
|  | **Knowledge of anthropological measurements** |  |
| 1. | Height | 100 (100.0) |
| 2. | Weight | 100 (100.0) |
| 3. | Waist circumference | 16 (16.00) |
| 4. | Hip circumference | 16(16.00) |
| 5. | Knee height | 9(9.00) |
| 7. | Sitting height | (00.00) |
| 8. | Skinfold thickness | (00.00) |
| 9. | Head circumference | 5(5.00) |
|  | **Overall** | **30.75%** |
|  | **Knowledge of *Anganwadi* workers about immunization** |  |
| 1. | Immunization given during birth of child | 99(99.00) |
| 2. | Immunization given during 1-2 month of child | 97(97.00) |
| 3. | Immunization given during 2-6 month of child | 83(83.00) |
| 4. | Immunization given during 6-12 month of child | 83(83.00) |
| 5. | Immunization given during 1-2 years of child | 79(79.00) |
| 6. | Immunization given during2-5 year of child | 99(99.00) |
|  | **Overall** | **90%.** |
|  | **Knowledge of *Anganwadi* workers about nutritional requirements for pregnant and lactating women** |  |
| 1. | Iron rich nutrient | 83(83.00) |
| 2. | Protein | 98(98.00) |
| 3. | Fat | 100(100.0) |
| 4. | Calcium | 73(73.00) |
| 5. | Vitamin | 71(71.00) |
| 6. | Folic acid | 34(34.00) |
| 7. | Any other | 12(12.00) |
|  | **Overall** | **67.43%** |

The majority of the respondents possessed knowledge regarding immunization during birth of child and immunization given during 2-5 years of child i.e. 99 per cent. This is consistent with findings by Sarkar (2018) who reported that *Anganwadi* workers had better knowledge on immunization. Cent per cent of *Anganwadi* workers maintained records of immunization, health check-ups. The respondents had possessed knowledge of fat rich (100.00%) nutrient sources followed by protein rich nutrient (98.00%), iron rich (83.00%) nutrient sources. Regarding calcium and vitamin respondents had 73 per cent and 71 per cent of knowledge respectively. Under other aspects they include nutrient like carbohydrates, iodine, sodium, phosphate, magnesium and fatty acid and possessed 12 per cent knowledge. Almost similar results were conducted by Bhimani (2020)and revealed that 65 per cent *Anganwadi* workers had knowledge about rich sources of calcium.

**Fig 1: Knowledge of Developmental activity**

**Fig 2 :** **Knowledge of *Anganwadi* workers about nutritional requirements for pregnant and lactating women**

**Activities performed by *Anganwadi* workers:** The *Anganwadi* workers carried out physical, cognitive, emotional, language and social developmental activity that is needed for the proper development of the children. Various outdoor and indoor games were included for physical development of children. In outdoor games, the respondents included running (94.00%), tug of war (15.00%), jump rope (47.00%), hide and seek (89.00%), swing the statue (25.00%) and red light green light, stop! Games (11.00%). The respondents used to involve all children in indoors games like toy playing (100.00%), ludo, snake and ladder (53.00%), exercise (34.00%) and carom and yoga activity (28.00%) for physical development of children. In cognitive development activities the *Anganwadi* workers carried out puzzle games (78.00%), sudoku (11.00%), clay modelling (69.00%), practice shapes and colors, practice alphabets (75.00%) and identify noise (3.00%).

|  |  |  |
| --- | --- | --- |
| **Table 4. Different activities performed by *Anganwadi* workers**  (n =100) | | |
| Sr. No. | **Physical developmental activities** | **f (%)** |
|  | **Outdoor games** | |
| 1. | Running | 94(94.00) |
| 2. | Tug of war | 15(15.00) |
| 3. | Jump rope | 47(47.00) |
| 4. | Hide and sick | 89(89.00) |
| 5. | Hopscotch | 47(47.00) |
| 6. | Swing the statue | 25(25.00) |
| 7. | Red light green light, stop! | 11(11.00) |
|  | **Indoor games** | |
| 1. | Yoga | 28(28.00) |
| 2. | Ludo | 53(53.00) |
| 3. | Carom | 28(28.00) |
| 4. | Snake and ladders | 53(53.00) |
| 5. | Exercise | 34(34.00) |
| 6. | Playing with toys | 100(100.00) |
|  | **Cognitive developmental activities** | |
| 1. | Puzzle games | 78(78.00) |
| 2. | Sudoku | 11(11.00) |
| 3. | Clay modelling | 69(69.00) |
| 4. | Practice shapes and colours | 81(81.00) |
| 5. | Practice alphabets | 75(75.00) |
| 6. | Identify noise | 3(3.00) |
|  | **Emotional developmental activities** | |
| 1. | Role play | 74(74.00) |
| 2. | Puppets | 41(41.00) |
| 3. | Listening games | 12(12.00) |
| 4. | Drawing | 24(24.00) |
|  | **Language developmental activities** | |
| 1. | Story telling | 88(88.00) |
| 2. | Rhymes | 44(44.00) |
| 3. | Tongue twisters | 5(5.00) |
| 4. | Poem | 88(88.00) |
|  | **Social developmental Activities** | |
| 1. | Group games | 53(53.00) |
| 2. | Fantasy play | 22(22.00) |
| 3. | Creative play | 4(4.00) |

For the emotional development of children, the respondents carried out puzzle games (78.00%), sudoku (11.00%), clay modelling (69.00%), practice shapes and colors, practice alphabets (75.00%) and identify noise (3.00%). The *Anganwadi* workers carried out activities like poem (88.00%) and story-telling (88.00%) followed by rhymes (44.00%), tongue twisters (5.00%) for language development of children. The *Anganwadi* workers was not so much interested in carried out social development activity. Fifty-three per cent of respondents used group games and 22 per cent carried fantasy play. Creative play was carried out by only 4 per cent of respondents.

**Correlation between independent variable and knowledge of *Anganwadi* workers**: The age of respondents was negatively corelated to the knowledge of developmental activities that and knowledge of immunization which means with the increasing age the *Anganwadi* workers had less knowledge. It might be due to taking no interest, low confidence and low level of education of aged *Anganwadi* workers. With increasing education level of *Anganwadi* workers, the knowledge was also increasing. The working experience of *Anganwadi* workers have negatively corelated. This was due to the *Anganwadi* workers had old developmental activity games, less knowledge of anthropometric measurement equipment, less awareness and less nutritional knowledge due to low education level.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 5. Correlation between independent variable and knowledge**  **of *Anganwadi* workers**  (n=100) | | | | | |
| **Sr.no** | **Independent variable** | **Knowledge of developmental activities** | **Knowledge of anthropological measurement** | **Knowledge of immunization** | **Nutritional Knowledge** |
|  | **Age** | -.429\*\* | -.178 | -.303\*\* | -.152 |
|  | **Family type** | -.439 | .148 | .052 | .090 |
|  | **Family size** | -.161 | .219\* | .068 | .108 |
|  | **Education** | .248\* | .186 | .114 | .270\*\* |
|  | **Marital status** | -.019 | -.070 | .093 | -.049 |
|  | **Income** | .037 | -.095 | .104 | .181 |
|  | **Caste** | -.152 | -.023 | -.072 | -.181 |
|  | **Land** | .24 | .014 | .101 | .121 |
|  | **Working experiences** | -.438\*\* | -.291\*\* | -.307\*\* | -.372\*\* |

\*\* Significant at 0.05 level of significance

\*Significant at 0.01 level of significance

**Correlation of independent variable and overall knowledge of *Anganwadi* workers:** The data revealed that knowledge was negatively correlated with age and working experience. In this study the majority of respondents between age group of above 40 were not aware about the proper knowledge regarding developmental activity, nutrition knowledge, anthropological measurement etc. They were less educated and their confidence level were also low as comparison to young respondents. This could be the main reason of the knowledge is negatively correlated with age and working experience. With education the knowledge was positively correlated. As it was justified that with education knowledge of respondent’s increase.

|  |  |  |
| --- | --- | --- |
| **Table 6. Correlation of independent variable and overall knowledge of *Anganwadi* workers.** | | |
| Sr. No. | **Independent variable** | **Knowledge** |
| 1. | Age | -.333\*\* |
| 2. | Family type | .002 |
| 3. | Family size | .015 |
| 4. | Education | .287\* |
| 5. | Marital status | -.065 |
| 6. | Income | .076 |
| 7. | Caste | -.056 |
| 8. | Land | .072 |
| 9. | Working experiences | -.478\*\* |

\*\* Significant at 0.05 level of significance

\*Significant at 0.01 level of significance

**Table 7. Grade-wise differences in mean score (± S.D) distribution of *Anganwadi* workers knowledge**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 7. Grade-wise differences in mean score (± S.D) distribution of *Anganwadi* workers knowledge**  **(n=100)** | | | | |
| Sr.no |  | **Block I**  **(n= 50)** | **Block II**  **(n= 50)** | **t-value** |
| Mean ± S.D | Mean ± S.D |
|  | **Knowledge** |  |  |  |
|  | Developmental activity | 9.24+1.02 | 9.58+.78 | 1.866 |
|  | Anthropological measurement | 11.18+.561 | 11.70±.560 | 2.685\*\* |
|  | Immunization | 11.34±1.00 | 11.46±1.16 | 0.552 |
|  | Nutritional knowledge | 10.76±1.20 | 10.28±1.19 | 1.999\* |
|  | Overall knowledge | 40.52±2.4 | 41±02±3.24 | 8.74\*\* |

The table represents the differences in the mean knowledge scores (± standard deviation) of *Anganwadi* workers (n = 100) across two blocks, Block I (n = 50) and Block II (n = 50). The knowledge was assessed across four specific domains: developmental activity, anthropological measurement, immunization, and nutritional knowledge, as well as for overall knowledge. In case of developmental activity, the mean knowledge score was slightly higher in Block II (9.58 ± 0.78) compared to Block I (9.24 ± 1.02). However, the difference was not statistically significant (t = 1.866, *p > 0.05*). Comparison regarding knowledge of anthropological measurement showed that *Anganwadi* workers in Block II had a significantly higher mean score (11.70 ± 0.560) compared to those in Block I (11.18 ± 0.561). The difference was statistically significant (t = 2.685, p < 0.01), indicating better knowledge in this domain among workers in Block II. No significant differences were observed in case of immunization knowledge among the two groups. *Anganwadi* workers in Block I demonstrated slightly better nutritional knowledge (10.76 ± 1.20) compared to Block II (10.28 ± 1.19). This difference was statistically significant (t = 1.999, *p < 0.05*), suggesting better performance by Block I in this domain. In case of overall knowledge Block II (41±02±3.24) was significantly (t = 8.74, p < 0.01) ahead of Block I (40.52±2.4) highlighting that workers from Block II possess better knowledge than Block I workers.

**CONCLUSION**

Assessing the health and education expertise of *Anganwadi* workers in order to empower rural communities is an important project with broad ramifications. The results showed that the majority of respondents were between the ages of 40 and 50, married, from a general caste, lived in a joint family with a small family size, had completed secondary education or matriculation, earned between Rs. 1-2 lacs, owned less than 2.5 acres of land, had a medium level of material possessions, and had between 10 and 20 years of experience. The *Anganwadi* personnel were well-versed in the physical and verbal activities that help pre-schoolers thrive. The *Anganwadi* worker was also knowledgeable about the measurements of height and weight, as well as the nutrients that nursing and pregnant women need. Policymakers, stakeholders, and community leaders should thus use the current study assessments as a reference for creating focused interventions to improve the efficiency of *Anganwadi* staff in promoting favourable health and educational outcomes. Furthermore, empowering *Anganwadi* workers entails more than just improving their knowledge.

**References**

Arya M, Sachan V, Limbu R, Nautiyal P and Papnai G (2018). Effect of training on nutritional knowledge of anganwadi workers of Uttarkashi district in Uttarakhand. *Journal of Krishi Vigyan,* 7 (1): 105- 108

Bhimani, Gita J., Bariya, M. K. and Rathod, J. H. (2020) Knowledge regarding food and nutrition among farm women. *Gujrat journal of Extension Education* ,31(1):18-21.

Gautam, M. (2019) Empowerment Level amongst the Adolescent Girls in Agra District. *Indian Research Journal of Extension Education,* 19(4): 21-23.

Gautam, M. (2020) Differential frequency of obtaining knowledge of ICDS beneficiaries by AWWs in selected rural and slum areas of Agra District. *Indian Journal of Extension Education,* 56(3):153-156.

Ghosh, A., & Sengupta, P. R. (2022). Life and work of *Anganwadi* workers: A literature survey. *Asian Journal of Management*, *13*(2):120-126.

Jadav, P. P., and Dave, P. H (2022). Nutritional awareness prevailing among *Anganwadi* workers. *Gujrat journal of Extension Education*, 34(1):57-61.

Jena, P. (2013) Knowledge of *Anganwadi* Worker about Integrated Child Development Services (ICDS): A Study of Urban Blocks in Sundargarh District of Odisha (Doctoral Dissertation). Department of Humanities and Social Sciences, NIT, Rourkela*,* 1-5.

Joshi, Kalpana, and K. Verma. (2018). Knowledge of Anganwadi workers and their problems in Rural ICDS block. *IP journal of paediatrics and nursing science,* 1(1): 8-14.

Kachhot, S., and Khandelwal, N. (2023) Assessment of nutritional status of *Anganwadi* children. *Gujrat journal of Extension Education*. *36(1)*: 129-134

Manhas, S. and Dogra, A. (2012). Awareness among *Anganwadi* Workers and the Prospect of Child Health and Nutrition: A Study in Integrated Child Development Services (ICDS), Jammu and Kashmir. *The Anthropologis,.*14(1): 171-175.

Parikh, P. and Sharma, K. (2011) Knowledge and Perceptions of ICDS *Anganwadi* Workers with Reference to Promotion of Community Based Complementary Feeding Practices in Semi Tribal Gujarat. *National Journal of Community Medicine*, 2(3): 457-464.

Patel, G. J., Thorat, G. N., & Patel, D. (2017) Knowledge of nutritional practices among the *Anganwadi* workers of Dahod district*. Gujrat journal of Extension Education,* 28(2):325-328.

Patil, S. B. and Doibal, M. K. (2013) Study of Profile, Knowledge and Problems of *Anganwadi* Workers in ICDS block. *Indian Journal of Basic and Applied Medical Research*, 2: 738-744.

Sarkar, R. (2018). A study to assess the knowledge about integrated child development services of Anganwadi workers and their problems. *International Journal of Social Science and Economic Research,* *3*(12): 7000-7013.

Sharma, B. and Jain, S. (2014) Impact of ICDS trainings on nutritional knowledge of *Anganwadi* workers. *Asian Resonance*, 4: 221-25.

Shukla, P. (2013) A Study on Knowledge Level and Training Needs of *Anganwadi* Workers in Relation to Health and Nutritional Aspect in Rewa District. *International Journal of Social Science and Economic Research,* 3(12):1-13.