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### Research Article



### Impact of Work Experience and Age on Nutritional Knowledge of Anganwadi Workers

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### ABSTRACT

The study examined impact of age and work experience on nutritional knowledge of anganwadi workers (AWWs). The present research was conducted in purposively selected Ajmer and Udaipur district of Rajasthan. Study sample consisted of 60 AWWs from four anganwadi workers training centers (AWTCs). Result revealed a negative significant relationship between age, experience of AWWs and their knowledge of nutrition. Nutritional knowledge score went on decreasing with increasing age and work experience of AWWs. It indicates a need to educate AWWs in more effective manner through frequent refresher trainings.

Key words: Work experience, Age, Nutritional knowledge, Anganwadi workers

#### **INTRODUCTION**

It is assumed that accumulation of experience with age results in better quantity and quality of knowledge. Work experience has gradually come to be recognized as a useful tool for inducting young people into the workforce, and shaping their career aspirations.

Integrated child development services scheme (ICDS) is a widespread programme designed with intentions to improve the nutritional and health status of children in the age group of 0-6 years by reducing the prevalence of malnutrition. ICDS also aims to develop the capability of the mother to look after the normal health and nutritional necessities of the child through proper nutrition and health education. Anganwadi worker is expected to provide nutrition and health counseling once a week to adolescent girls, pregnant and lactating mothers. Anganwadi workers'work experience may have an impact on her knowledge about nutrition and health. Thus an effort was made to find out the relationship between work experience, age and knowledge of AWWs about nutrition.

### MATERIALS AND METHODS

There are total 21 anganwadi training centers (AWTCs) in Rajasthan state. The present study was conducted in the purposively selected Ajmer and Udaipur district of Rajasthan as the researcher is well acquainted with the study area.

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There are four and three AWTCs in Ajmer and Udaipur district respectively, out of which 2 AWTCs were selected from each district for the study purpose based on feasibility and level of cooperation ensured by them.

From the selected AWTCs a sample of 60 anganwadi workers was selected randomly in such a manner that numbers of anganwadi workers from each AWTC were equal. Selfconstructed research tool was administered for the data collection. Tool consisted two section *i.e.* performa containing information regarding their background information and questionnaire. Questionnaire consisting of 50 items, derived from anganwadi workers training syllabus was constructed. These items were carefully scrutinized by a team of experts. The questionnaire was consisting of questions regarding basic nutrition, nutrition for vulnerable groups and growth monitoring of young children. Research tool was thoroughly explained to the anganwadi

workers prior to distribution of tool among them. One hour was given to fill the questionnaire to each of the respondent.

# Percentage distribution of AWWs according to the categories of nutritional knowledge

A person acquires knowledge through life experiences, which enhance their capabilities by improving their knowledge and skills. Hence the age was included as a variable in the present study.

Table 1 reveals that in the age group of 21-30 years (53.33%), 31-40 years (60.71%), and 41-50 years (61.53%) more than half of the AWWs were in the average category whereas in the age group of above 50 years half of the AWWs were poor, one fourth of the AWWs were good, and one fourth of AWWs were average at nutrition knowledge. It indicates that young AWWs had better knowledge of nutrition compared to their older counterparts.

N=60

Table 1: Percentage distribution of anganwadi workers by their age group and overall nutrition
knowledge category

					11-00		
S.	Age group	Categories of knowledge about nutrition					
No.		Excellent	Good	Average	Poor		
1.	21-30	-	3.33(2)	13.33(8)	8.33 (5)		
2.	31-40	-	13.33(8)	28.33(17)	5.00(3)		
3.	41-50	-	-	13.33(8)	8.33(5)		
4.	Above 50	-	1.67(1)	1.67 (1)	3.33 (2)		
Overall		-	18.33(11)	56.67(34)	25(15)		

Figure in parenthesis is number of anganwadi workers

## Nutrition knowledge of anganwadi workers according to their age groups:

It is evident from table 2 that mean score of knowledge of basic nutrition is highest in the age group of above 50 years (14.25) and lowest in the age group of 41-50 years (9.46). Mean score of knowledge of nutrition for vulnerable groups is found highest (11.78) in the age group of 31-40 years and lowest (9.07) in the age group of 41-50 years. Mean score of

knowledge of growth monitoring is highest (3.25) in the age group of above 50 years and lowest (1.69) in the age group of 41-50 years. Mean score of knowledge of overall nutrition is found highest(28) in the age group of above 50 years and lowest (20.23) in the age group of 41-50 years. It can be clearly stated that AWWs from the age group of 41-50 years had lowest knowledge in all aspects of nutrition.

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S.	Age Group	Aspects of nutrition					
No.		Basic nutrition	Nutrition for vulnerable groups	Growth monitoring	Overall nutrition		
		(Maximum	(Maximum	(Maximum	(Maximum		
		score=23)	score=22)	score=5)	score =50)		
1.	21-30 Years	9.53	10.86	2.26	22.66		
		±2.44	±3.44	±1.53	±5.12		
		(0.63)	(0.88)	(0.39)	(1.32)		
2.	31-40 Years	11.85	11.78	2.42	26.07		
		±2.56	±2.8	$\pm 1.10$	±4.82		
		(0.48)	(0.53)	(0.20)	(0.91)		
3.	41-50 Years	9.46	9.07	1.69	20.23		
		±3.86	±3.54	±0.63	±7.04		
		(1.07)	(0.98)	(0.17)	(1.95)		
4.	Above 50	14.25	10.5	3.25	28.00		
	Years	±1.26	±3.87	$\pm 2.22$	±11.52		
		(0.32)	(1.0)	(0.57)	(2.97)		

Statistical analysis shows significant negative correlation between age and knowledge of nutrition (i.e. overall nutrition, nutrition for vulnerable group and growth monitoring) of AWWs. The correlation for overall nutrition and growth monitoring was significant at 5 per cent level of significance whereas correlation regarding nutrition for vulnerable groups was significant at 1 per cent level of significance. No significant correlation (P>0.05) was found between age and knowledge of basic nutrition of AWWs. Thus, overall impact of age is shown negatively on the nutrition knowledge of AWWs. . Findings are contradictory to the findings of Sondankar et al.<sup>4</sup>, who revealed a significant positive relation between age and knowledge of AWWs. Sravani<sup>1</sup> concluded that age does not affect the anganwadi Workers knowledge and practices in both the areas *i.e.* growth monitoring and supplementary feeding.

Findings are also contradictory to the finding of Thakare et al.<sup>2</sup> that most of the AWWs were from age group of 41-50 years, had 77.14 percent knowledge about nutrition and health education. The reason might be that they may be losing interest in learning and zeal to gain knowledge with increasing age. The negative correlation between age and knowledge of overall nutrition as found in study may be attributed to decreased attention to new updates in older AWW's. Young AWW's assimilate and use newly acquired information rather easily.

**Work experience:** Work experience in the study was recorded in terms of number of years completed in the service. It is always considered that "experience makes a man perfect". It was observed that about 50 per cent of anganwadi workers had more than 10 years of experience in the service. It gives a vision that the study group might have good knowledge of nutrition. Mean duration of service was found to be 11.62 years.

### Relationship between work experience and overall nutrition knowledge

Table 3 clearly shows that none of the AWWs were excellent at overall knowledge of nutrition. In the present study AWWs those fall into the good category, out of them 90.9 per cent had job experience of up to 15 years. AWWs those have job experience of 21-30 years did not fall into good category of knowledge of overall nutrition. AWWs with experience of less than 15 years scored higher than more experienced AWWs. Mean score of overall nutrition knowledge of all AWWs was found to be 23.42.

Statistical analysis of data reveals a significant negative correlation between work experience and overall nutrition knowledge of AWWs (P<0.01) which indicated that as the work experience of AWWs increases the knowledge of AWWs decreases. Findings are not in line with the findings of Thakare *et al.*<sup>2</sup>,, Patil *et al.*<sup>3</sup>, Sondankar *et al.*<sup>4</sup>, who indicated a significant positive relationship between age and work experience of AWWs.

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N=60

Table 3: Mean ±SD (SE) and Percentage distribution of anganwadi workers by their work experience and
overall nutrition knowledge score

S.	Job experience (in years)	Cate	gories of know	Mean score ±SD (SE)		
No.		Excellent	Good	Average	Poor	Maximum score = 50
1.	Up to 5	-	6.67 (4)	13.33 (8)	3.33 (2)	24.71 ±5.70(1.52)
2.	6-10	-	5.00 (3)	18.33 (11)	6.67 (4)	25.16 ±4.81(1.13)
3.	11-15	-	5.00(3)	8.33 (5)	3.33 (2)	24.40 ±6.18(1.95)
4.	16-20	-	1.67 (1)	6.67 (4)	3.33 (2)	21.00 ±9.11(3.44)
5.	21-25	-	-	8.33 (5)	5.00 (3)	19.50 ±7.21(2.54)
6.	26-30	-	-	1.67 (1)	3.33 (2)	19.66 ±8.02(4.63)
	Overall	-	18.33 (11)	56.67 (34)	25 (15)	23.42 ±6.44(0.83)

Figure in parenthesis is number of anganwadi workers

## Nutrition knowledge of anganwadi workers according to their work experience:

It is evident from table 4 and fig. 1 that mean score of knowledge of basic nutrition is found highest in the AWWs those had 6-10 years job experience and lowest in 16-20 years experienced AWWs. It is clear from table 4, fig. 2 and fig.3 that mean score of knowledge of nutrition for vulnerable group and growth monitoring is found highest in AWWs those have experience of up to 5 years and lowest among the workers have experience of 26-30 years.

Table 4: Mean scores	of nutrition	knowledge of	anganwadi y	vorkers accordi	ng to their exp	erience
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S.	Work experi	ence	Aspects of nutrition			
No.			Basic	Nutrition for	Growth	Overall
			nutrition	vulnerable	monitoring	nutrition
				groups		
			(Maximum	(Maximum	(Maximum	(Maximum
			score=23)	score=22)	score=5)	score = 50)
1.	0-5 Years	Mean	9.50	12.64	2.57	24.71
		SD	$\pm 2.90$	±3.24	±1.22	$\pm 5.70$
		SE	0.77	0.86	0.32	1.52
2.	6-10 Years	Mean	11.83	11.05	2.27	25.16
		SD	$\pm 2.00$	±2.71	±1.17	$\pm 4.81$
		SE	0.47	0.63	0.27	1.13
3.	11-15 Years	Mean	11.50	10.80	2.10	24.40
		SD	$\pm 3.30$	±3.32	±1.52	±6.18
		SE	1.04	1.05	0.48	1.95
4.	16-20 Years	Mean	9.29	9.29	2.43	21.00
		SD	±4.72	±3.90	±0.98	±9.11
		SE	1.78	1.48	0.37	3.44
5.	21-25 Years	Mean	10.00	8.12	1.37	19.50
		SD	±4.27	±3.44	±1.06	±7.21
		SE	1.51	1.21	0.37	2.54
6.	26-30 Years	Mean	10.66	8.00	1.00	19.66
		SD	±3.51	±4.58	±0.00	±8.02
		SE	2.02	2.64	0.00	4.63

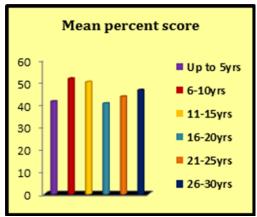
It is evident from the table 4 and fig.4 that mean score of knowledge of overall nutrition is found highest in AWWs those have experienced of up to 5 years and lowest in 21-25 years experienced AWWs. It can be stated that AWWs those had job experience up to 10 **Copyright © August, 2017; IJPAB**  years possessed highest scores and those had job experience of more than 15 years possessed lowest scores of nutrition knowledge. This may be due to the reason that AWWs not attended the refresher courses in due time. Statistical analysis shows a

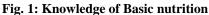
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significant correlation (P<0.01) negative experience knowledge of between and nutrition of AWWs (i.e. overall nutrition, nutrition for vulnerable groups and growth monitoring) whereas no significant relationship was found between experience and knowledge of basic nutrition. Thus, impact





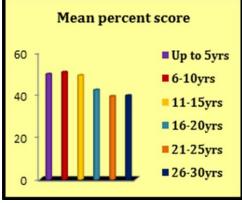
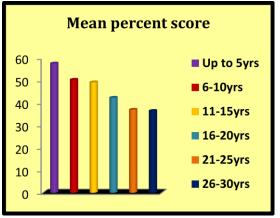
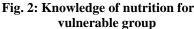


Fig. 3: Knowledge of growth monitoring

of work experience has shown a negative relationship with overall nutrition the knowledge of AWWs. The reason may be attributed to the quote by William Feather that experience and enthusiasm are two fine business attributes seldom found in one individual.





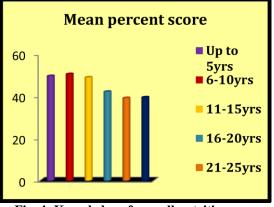


Fig. 4: Knowledge of overall nutrition

Figures showing nutritional knowledge of anganwadi workers in relation to their work experience

### **CONCLUSIONS**

In contrast to the conventional belief, study revealed a significant negative relationship between age, work experience and nutritional knowledge of AWWs. Emphasis should be given on timely completion of recommended refresher trainings of ICDS. Frequent refresher trainings should be imparted in an innovative and interesting manner to enhance their enthusiasm towards learning.

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