



***The World's Largest Open Access Agricultural & Applied Economics Digital Library***

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

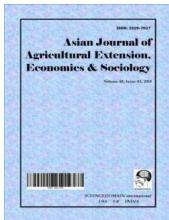
**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*



## **Assessment of Intervention Being Provided at AWCs Related to Nutrition and Care during Pregnancy and Lactation in District Budgam of Kashmir Region J&K (Based on Beneficiary Responses)**

**Iffat Ghani<sup>1</sup> and Rajini Dhingra<sup>2</sup>**

<sup>1</sup>*Krishi Vigyan Kendra (KVK), SKUAST-K, Pulwama, Kashmir, India.*

<sup>2</sup>*Faculty of Sciences, University of Jammu, India.*

### **Authors' contributions**

*This work was carried out by author IG who designed the study, performed the statistical analysis, wrote the protocol and the first draft of the manuscript. Author RD did the supervision only. Author IG itself read and approved the final manuscript.*

### **Article Information**

DOI: 10.9734/AJAEES/2017/34339

Editor(s):

(1) Rohaiza Rokis, Department of Sociology and Anthropology, International Islamic University Malaysia, Malaysia.

Reviewers:

(1) Hannah Mills Mechler, Texas Woman's University, USA.

(2) Vijayakhader, Acharya N. G. Ranga Agricultural University, India.

(3) Ender Durualp, Ankara University, Turkey.

Complete Peer review History: <http://www.sciedomain.org/review-history/20021>

**Original Research Article**

**Received 24<sup>th</sup> May 2017  
Accepted 30<sup>th</sup> June 2017  
Published 13<sup>th</sup> July 2017**

### **ABSTRACT**

This research was planned to study the intervention being provided by AWCs (Anganwadi Centers) to improve the knowledge level of women beneficiaries regarding health care and nutrition during pregnancy and lactation. In this context, four blocks were purposively selected from district Budgam of Kashmir region. From these four blocks 60 AWCs were randomly selected through lottery method with 15 AWCs from each block. A total number of 240 women beneficiaries were purposively selected from these AWCs with only 4 beneficiaries (2 Mothers of Child beneficiary, 2 Nursing mothers and 2 Pregnant women) from each centre. The Study revealed that insufficient intervention is being provided across all the four blocks regarding health care and nutrition during pregnancy. The only intervention that is being provided is through lectures or discussion during VHND (Village and Health Nutrition Day) and NHED (Nutrition and Health Education Day)

\*Corresponding author: E-mail: iffatghani777@gmail.com;

meetings. However, these meetings are being conducted occasionally at Health centres or AWCs through health personnel or ASHA workers. No specific intervention or advice related to importance of regular health checkups, nutrition, weight monitoring or maintenance of Hb level during pregnancy is observed. The only aspect where intervention is being provided at the best is vaccination during pregnancy and maintenance of vaccination cards including nutrition as per the supply and availability of ration at centers. However, in block Budgam and Nagam intervention regarding importance of health care and importance of nutrition during pregnancy was provided through regular lectures during nutrition distribution hour and through home visits. Moreover, basic pre-natal care components are effective means to prevent range of pregnancy complication and reduce maternal mortality. The findings indicate that there is need for enhancement of intervention educational programme in ICDS regarding importance of prenatal care and service for the healthy birth outcome and mothers' well being. However, there are also still many important aspects /areas where intervention need to be focused to improve the knowledge of Kashmiri women.

**Keywords:** ICDS; AWCs; health; nutrition; intervention; Kashmiri women.

## 1. INTRODUCTION

Integrated Child Development Scheme (ICDS) is one of the unique programmes for early childhood care and development in India. Under this scheme, a package of services consist of supplementary nutrition, immunization, health check-up, referral services, health education and non-formal preschool education provided to children below 6 years and pregnant and nursing mothers [1]. The centre piece of this programme is the provision of free food: A cereal based meal prepared variably from locally available ingredients but providing on an average about 2.09 MJ and 20-25 g protein to pregnant/lactating women and about 1.25 MJ and 8-10 g protein to children up to 6 years. The supplement has to be collected daily by the woman (or her children) from the Integrated Child Development Services centre (run by a local woman trained for this programme), but they are not obliged to eat it there [2]. These services are delivered through various Anganwadi centers located in villages. The "Anganwadi Centre" literally means a courtyard play center located within the village or slum area, which is the focal point of delivery of services at community level to children below 6 years of age, pregnant woman, nursing or lactating mothers and adolescent girls. Anganwadi worker is in charge of Anganwadi centre that is selected from the same community where the Anganwadi centre is located. The impact of this scheme made a big difference in the health and development of the vulnerable groups in India [3]. Supplementary nutrition has been one of the core activities of ICDS. Distribution of food at the AWC serves as a stimulating factor for involvement of community members in ICDS functioning. Close to half of the total pregnant women reported receiving

supplementary food from the AWC in any form (spot consumption or take away). The acceptability of supplementary nutrition is quite high though a considerable section of beneficiaries reportedly do not avail food at AWC, indicating further need for more intense efforts towards sensitization of the community. Owing to instances of interrupted food supply, poor quality and non-diversity of food reportedly results in low attendance and drop out. Therefore, adequate resource allocation based on a realistic beneficiary assessment, timely release of budgets and procurement, supply chain management and logistics are critical to ensure a stable and adequate service delivery. Anganwadi workers, being close to the community, also provide health and nutrition education and counsel women beneficiaries on breast feeding/infant and young feeding practices to mothers. The findings show that more than two fifth of the total urban women had received three or more ANCs while rural women accounted for 26 percent and tribal women 16 percent. ANMs were more commonly found provider of ANC in rural and tribal blocks while urban women avail services from doctor more frequently. Rural and tribal women received the services more through AWC/AWW than SC/PHC/Hospital. Majority of lactating women and mothers of children 6 month to 3 years delivered their last child at PHC/government hospital while in case of mothers of children between 3 and 6 years more than half (54 percent) delivered their index child at home [4]. A study conducted in Jammu and Kashmir, under the scheme reveals that a total number of 368060 eligible children (6-72 months age) and 90215 pregnant and lactating women are getting 8 benefits for various services [5]. But in spite of the ongoing direct nutrition interventions like ICDS, India still contributes to

about 21 percent of the global burden of child deaths before their fifth birthday [6]. The ICDS is perhaps one of the better-concerned programmes, yet on travels around country one realizes that there is a huge gap between what is expected of the programme and the ground situation. What is even more worrying is that even the existing centers do not function effectively and that dishonesty, mismanagement seems to permeate even the ICDS programme [7]. In another study conducted by [9] it was reported that coverage of all beneficiaries receiving supplementary nutrition among enrolled was high for pregnant women (88.3%) and lactating mothers (91.7%), in different districts of Gujrat, indicating good rapport of anganwadi workers with adolescents and reproductive age female.

Dash in his research conducted in 2006 at Orissa assessed the impact of ICDS centres in the state of Orissa and it was found that supplementary feeding was usually given for 25 days in a month. And nearly 73% mothers of beneficiary children had received treatment/ health services from AWW. It was also seen that 8 out of every 10 lactating mothers mentioned that they did not receive any IFA tablets from the AWCs. However, 93% of the pregnant women mentioned that they had received at least 1 antenatal check up, but only 22% of the pregnant women received 3 health check-ups [8].

## 1.1 Objectives

- To Assess the intervention being provided by AWCs regarding health and nutrition during pregnancy and lactation in district Budgam.
- To compare the assessment across the four blocks of district Budgam (Blocks Nagam, Chadoora, Budgam and B.K. Pora)

## 2. METHODOLOGY

In order to draw the desired sample, initially the lottery method was used for selection of the AWCs by obtaining a list of AWCs from each ICDS project officer of the selected block. There were more than 150 AWCs in each block. Out of the total number of AWCs in each block under study only 15 centers were selected.

### 2.1 Sampling of Blocks

Four blocks were purposively selected out of eight blocks of the district Budgam as per the

accessibility and the number of ICDS centers in the area.

240 sample beneficiaries were selected from 60 AWCs from four blocks of district. Budgam, through random sampling technique. Including 4 beneficiaries from each sample AWC (Two MCB, One PW and One NM).

- Only 5 mothers of child beneficiaries (MCB), based on their willingness to participate in the study, were selected from the each AWC from the attendance register maintained for this group of beneficiaries. Only those mothers having children in the age group 6 month-3years of age and registered beneficiaries of the selected AWC were selected for the study.
- Similarly a total of 5 women beneficiaries (NM & PW) from both the groups were randomly selected from the attendance register maintained by the AWW. Only those nursing mothers with child (0-6months) and the registered beneficiaries of the selected AWC were selected for the study. Also, pregnant women, who were registered beneficiaries of the selected AWCs were included.

## 2.2 The Sample

Kashmir region has been selected for the study with the view that, Kashmir has been affected by armed conflict since 1990 and constant tension in the territory has its direct manifestation on the most vulnerable group of population i.e., women and children. Budgam from Kashmir has been selected for this study, which is having eight blocks and 593 villages. The total population of the district is 7.35 lacs with sex ratio of 830/1000 and literacy rate 57.98% (2011 census). Out of eight blocks, sample was selected from four blocks (Budgam, Nagam, Chadoora & B.K.Pora) in a representative manner. For sampling, a list of Anganwadi centres (AWCs) was obtained from the office of Project officer of ICDS of each block. After obtaining the lists of AWCs, the centers from each block were selected by random sampling technique using Lottery method. The maximum number of child beneficiaries in the age group 6 months-3 years registered in an AWC is 25 which can vary depending upon the population covered under the centre. Out of 25, only 4 mothers of child beneficiaries were purposively selected from the each AWC from the attendance register maintained for this group of beneficiaries. Similarly the maximum number

of nursing mothers and pregnant women registered in an AWC is 06, but the number of both the groups of beneficiaries is not always equal. For the present study a total of 4 women beneficiaries from both the groups were purposively selected from the attendance register maintained by the AWW. Beneficiaries having children in the age group (0-6 months) fall in the category of nursing mothers, while as beneficiaries having children in the age group (6 months-3 years) were considered as mothers of child beneficiaries.

### **2.3 Data Collection**

Ethical considerations with regard to the rights of respondents were applied when collecting data, only those respondents were selected who were ready to participate willingly. Some respondents were comfortable at AWC but majority preferred to be interviewed at home. The respondents were made fully aware of the type of information the researcher wanted from them, the reasons for seeking information, and the purposes the information will serve, how the study will directly or indirectly affect them. The researcher explained all above before data collection. For this study confidentiality and anonymity were ensured by the researcher and the respondents were assured that the information provided by them will exclusively be used for the stated purpose of the research.

### **2.4 Data Analysis**

- \* Percentages and Chi-square were calculated and computed.
- \* Data was scrutinized and analyzed, keeping in view the objective and was presented in suitable tables, diagrams and figures.
- \* Content analysis of data was also done.

The data was analyzed in two categories.

### **2.5 Elementary Analysis of Data**

The assembled data was properly scrutinized; numbers were assigned to all the items, according to the class and category in which they fall. The basic purpose of it was to facilitate greatly the task of tabulation of responses in computer software programme. Coding was done at the stage of pre-testing, at the data collection stage, as well as at the time just prior

to tabulation of data. Data having numerical responses were coded as well as put in actual scores in order to obtain enough information.

### **2.6 Statistical Analysis of Data**

Appropriate statistical techniques were employed in order to understand the problem under consideration and attempt was made to draw right inferences out of it. Such statistical analysis was done on computer using software programme namely Minitab 2000 and SPSS. The following computation is made in such programme.

### **2.7 Summary Statistics**

It has computed the percentage and frequencies of single variable at its various levels along with ratio computation, wherever necessary.

### **2.8 Cross-Tabulation**

It has made possible cross analysis of the data among the blocks. Computing counts, percentage. Levels of significance (p-value) on chi-square values ( $\chi^2$ ) along with its degree of freedom (df) level of significance is considered highly significant at less than or equal to 0.01 level, significant or less than at 0.05 level and insignificant at above 0.05 level.

### **2.9 Tools Used**

Self-devised Interview Schedule was prepared which was pretested on 12 women beneficiaries belonging to all the three groups and after some necessary modifications the interview schedule was finalized.

## **3. RESULTS AND DISCUSSION**

### **3.1 Intervention Provided in AWCs Regarding Nutrition & Care**

Mother care through augmented antenatal care, perinatal care and postnatal care services has always been an integral part of ICDS. Lactating women are utilizing ICDS services for improving their nutritional status (through supplementary nutrition and iron folic acid tablets) accepting family welfare advices and enhancing their knowledge for better care of their children.

**Table 1. Intervention provided in AWCs regarding nutrition and care during pregnancy**

Variables	Responses	Women beneficiaries										$\chi^2$ Analysis
		B.K. Poran=60		Budgamn=60		Nagamn=60		Chadooran=60		All Beneficiaries n=240		
		f	%	f	%	f	%	f	%	F	%	
(a) Type of Non-Formal Education provided by AWCs	Health & Nutrition	30	50.0	19	31.6	32	53.3	34	56.6	115	47.9	62.13 <sub>5</sub>
	Health only	11	18.3	32	53.3	28	46.6	26	43.3	97	40.4	
	Nutrition only	6	10.0	0	0	0	0	0	0	6	2.5	
	Childcare	3	5.0	0	0	0	0	0	0	3	1.2	
	All above	4	6.6	5	8.3	0	0	0	0	9	3.7	
	No education provided	6	10.0	4	6.6	0	0	0	0	10	4.1	
(b) Diet taken during pregnancy & Lactation	<b>Total</b>	60	100.0	60	100.0	60	100.0	60	100.0	240	100.0	8.66 <sub>3</sub> *
	Intervention provided	23	38.3	28	46.6	14	23.3	17	28.3	82	34.1	
	Not provided	37	61.6	32	53.3	46	76.6	43	71.6	158	65.8	
	<b>Total</b>	60	100.0	60	100.0	60	100.0	60	100.0	240	100.0	
(c) Precautions during pregnancy	Intervention provided	2	3.3	2	3.3	3	5.0	2	3.3	9	3.7	0.34 <sub>3</sub>
	Not provided	58	96.6	58	96.6	57	95.0	58	96.6	231	96.2	
	<b>Total</b>	60	100.0	60	100.0	60	100.0	60	100.0	240	100.0	

df in subscripts of  $\chi^2$  values \* denotes significant at 0.05 level Column percentage \*\*denotes significant at 0.01 level

Table (1) depicts the responses received from women beneficiaries regarding the various aspects of non-formal education provided at AWCs on various aspects of health to be considered during pregnancy. Overall, the results revealed that AWWs mostly discuss health and nutrition related in NHED sessions. The information provided was about type of foods to be preferred during pregnancy, vaccination schedule to be followed and intake of other supplements (folic acid tablets, iron and calcium) during the course of pregnancy. No significant difference in responses among the beneficiaries across the blocks was observed ( $p>0.05$ ). With reference to intervention related to importance of nutritious diet during pregnancy it was observed as per data given in table and reported by the majority (65.8%) of the sample beneficiaries that no such kind of intervention is being provided at the AWCs in selected blocks of district Budgam. However, across the blocks, 46.6% of sample beneficiaries from block Budgam reported to receive intervention related to such aspects in the form of lectures delivered either through health personnel, AWW or even sometimes by ASHA worker. Chi-square analysis indicates a significant ( $p<0.05$ ) difference in responses across the blocks on this dimension of intervention.

Similarly, as depicted by data given in Table 96.2% women beneficiaries revealed that no awareness was provided to women beneficiaries regarding the importance of weight monitoring, necessity for regular health checkups, maintenance of Hb level by consuming lots of fruits and fluids and regular monitoring of blood pressure and restrain from heavy workload which is very common in villages resulting in premature births or miscarriages. Only a very small percentage (3.7%) reported positively about receiving such kind of intervention. No significant ( $p>0.05$ ) difference in responses regarding intervention was statistically observed across the blocks.

### **3.2 Intervention Received Regarding Health Care during Pregnancy**

Prevention of anaemia through distribution of iron folic acid are the important national nutrition and health intervention programmes provided through ICDS centres to prevent anaemia among pregnant women. In addition the vaccination for

pregnant women and children as well as health checkups are provided through AWCs.

As far as health checkups of the PW is concerned (table), it is clear from data obtained from the women respondents that only a small percentage (11.2%) informed receiving intervention related to health check-ups. Making women beneficiaries aware about the importance of regular health check-ups during pregnancy, how carelessness during pregnancy can prove to be hazardous for their baby and their own health also provided the intervention. Across the blocks the beneficiaries from Nagam (16.6%) and Chadoora (16.1%) reported receiving such intervention. No significant ( $p>0.05$ ) difference was statistically observed across the blocks.

With reference to the weight monitoring during pregnancy, it is clear from the information gathered from almost 93% of sample beneficiaries that no specific intervention related to weight monitoring is provided at AWCs. However, they are sometimes made aware during VHND sessions regarding weight monitoring and its importance during pregnancy. Since such sessions are not organized regularly in most of the AWCs, or sometimes beneficiaries do not attend such gatherings, so there is inadequate awareness related to this aspect provided to its beneficiaries. In Nagam block only 11.6% sample beneficiaries reported receiving such intervention. Statistically no significant difference ( $p>0.05$ ) in responses related to weight monitoring among beneficiaries across the blocks is found.

In context to assistance provided regarding anemia & low maternal body weight, it is clear from the statements given by almost 60% of sample beneficiaries that assistance is provided in the form of lectures either by some health personnel or occasionally by the AWW itself if she is well aware. Beneficiaries are advised to take good and nutritious diet rich in iron, and in severe cases anemic women are referred to hospital or advised to consult a doctor, 40.4% informed receiving no such assistance at the AWCs. Among the blocks, beneficiaries from block B.K. Pora and Chadoora were receiving intervention related to this aspect. There was a highly significant ( $p>0.01$ ). Difference in responses related to this dimension of intervention across the blocks observed.

**Table 2. Intervention received regarding health care during pregnancy**

Variables	Responses	Women Beneficiaries										$\chi^2$ Analysis
		B.K.Pora N=60		Budgam N=60		Nagam N=60		Chadoora N=60		All beneficiaries N=240		
		f	%	f	%	f	%	f	%	f	%	
(a) Intervention related to health checkups.	Referred to PHC	57	95.00	56	93.3	50	83.3	50	83.3	213	88.7	7.13 <sub>3</sub>
	Provided at AWC	3	5.00	4	6.6	10	16.6	10	16.6	27	11.2	
	Total	60	100.00	60	100.00	60	100.00	60	100.00	240	100.0	
(b) Intervention related to weight monitoring.	Referred to PHC	4	6.6	3	5.00	7	11.6	3	5.00	17	7.0	2.72 <sub>3</sub>
	No intervention provided.	56	93.3	57	95.00	53	88.3	57	95.00	223	92.9	
(c) Assistance provided for anaemic /maternal low body weight	Total	60	100.0	60	100.0	60	100.0	60	100.0	240	100.0	18.87**
	Provided	28	46.6	44	73.3	44	73.3	27	45.00	143	59.5	
	Not provided	32	53.3	16	26.6	16	26.6	33	55.00	97	40.4	
	Total	60	100.0	60	100.0	60	100.0	60	100.0	240	100.0	
(d) Awareness provided for causes of anaemia/low body weight	Provided	4	6.6	4	6.6	8	13.3	1	1.67	17	7.0	6.26 <sub>3</sub>
	Not provided	56	93.3	56	93.3	52	86.6	59	98.3	223	92.9	
	Total	60	100.0	60	100.0	60	100.0	60	100.0	240	100.0	

df in subscripts of  $\chi^2$  values \* denotes significant at 0.05 level Column percentage \*\*denotes significant at 0.01 level

**Table 3. Intervention /awareness related to important health issues during pregnancy and lactation**

Variables	Responses	Women Beneficiaries										$\chi^2$ Analysis	
		B.K.Pora N =60		Budgam N =60		Nagam N = 60		Chadoora N = 60		All beneficiaries			
		f	%	f	%	f	%	f	%	f	%		
(a)Educator at the centre	AWW	12	20.00	24	40.00	4	6.67	4	6.67	44	18.33	58.30 <sub>6</sub> **	
	Health personnel	7	11.67	13	21.67	16	26.67	10	16.67	46	19.17		
	AWW/Health personnel	34	56.67	4	6.67	21	35.00	25	41.67	84	35.00		
	No education provided	7	11.67	19	31.67	19	31.67	21	35.00	66	22.50		
	Total	60	100.0	60	100.0	60	100.0	60	100.0	240	100.0		
b)Advice for taking supplements (iron/folic acid)	Advised	10	16.67	12	20.00	4	6.67	4	6.67	30	12.50	7.77 <sub>3</sub> *	
	Not advised	50	88.33	48	80.00	56	93.33	56	93.33	210	87.50		
	Total	60	100.0	60	100.0	60	100.0	60	100.0	240	100.0		
(c)Education about proper timing of TT	Education provided	60	100.0	17	28.33	47	78.33	56	93.33	180	75.00	100.8 <sub>3</sub> **	
	Not provided	0	0	43	71.67	13	21.67	4	6.67	60	25.00		
	Total	60	100.0	60	100.0	60	100.0	60	100.0	240	100.0		
(d)Assistance provided to lactating women	Only nutrition	60	100.0	31	51.67	44	73.33	54	90.00	189	78.75	48.38 <sub>6</sub> **	
	Health related	0	0	27	45.00	15	25.00	6	10.00	48	20.00		
	Either of two	0	0	2	3.33	1	1.67	0	0	3	1.25		
	Total	60	100.0	60	100.0	60	100.0	60	100.0	240	100.0		

df in subscripts of  $\chi^2$  values \* denotes significant at 0.05 level Column percentage \*\*denotes significant at 0.01 level

Similarly, with respect to awareness provided regarding the causes of anemia and low body weight it was observed from the responses of beneficiaries (93%) that no intervention is provided to Kashmir women beneficiaries. Only 13.3% from block Nagam reported to receive occasional intervention on health days. The beneficiaries were made aware that low body weight and anemia can result in severe complications and even leading to premature births. Statistically, no significant ( $p>0.05$ ) difference in responses across the blocks seen.

### **3.3 Intervention /Awareness Related to Important Health Issues during Pregnancy and Lactation**

The intervention and awareness is provided by the AWCs to its beneficiaries through NHED meetings or during VHND sessions, which are organized by the AWCs in collaboration with concerned PHCs of the zone. This activity is usually organized once in a month, where health and nutrition related intervention is provided to the beneficiaries.

It is clear from Table 3 that the educator at the AWC is either the AWW or the health personnel, depending upon the topic that is to be discussed. Awareness is usually provided during VHND (Village Health Nutrition Days) sessions. However, 22.5% sample beneficiaries also reported to receive no such awareness. Among the blocks beneficiaries from Chadoora reported receiving inadequate education related to various aspects of health and nutrition of women and children at the centers. A significant difference ( $p<0.01$ ) in awareness being provided in AWCs across the blocks was observed.

With reference to advice regarding nutritional supplements during pregnancy, a large proportion (87.5%) of women beneficiaries from selected AWCs of district Budgam under study reported that they are being advised to take supplements (folic acid, iron tablets) during pregnancy. No specific lecture or awareness is provided at the AWCs regarding the importance of taking dietary supplements. Across the blocks incomplete awareness was provided in B.K. Pora and Budgam. Chi-square analysis indicates a significant ( $p=0.05$ ) difference in responses among beneficiaries.

As far as educating the beneficiaries regarding proper timing of Tetanus Toxoid, majority (75%) said that adequate intervention related to this

aspect of care during pregnancy is provided. It was also observed that their vaccination cards are also being checked and updated and even reminded from time to time for the next expected dose of TT. Beneficiaries were also made aware to remember dates for vaccination, as it was very important to take vaccine at proper time for protection of mother and foetus. It was also reported by some of the beneficiaries that ASHA worker also plays a good role in health related aspects during pregnancy. Among the blocks B.K. Pora was providing better intervention related to this aspect in comparison to other blocks under study. Statistically, a significant ( $p<0.001$ ) difference in responses of beneficiaries across the blocks was observed.

Further, table depicts that a large majority (78.7%) of beneficiaries from selected AWCs of the sample blocks of Kashmir reported to receive assistance for lactating women in nutritional aspects only, with no other assistance being provided to them. However, 20 % respondents said that NMs are advised to take care of health by taking nutritious diet with lots of green leafy vegetables (GLV) milk, meat as per their availability and affordability. It was also advised by the AWWs that this will help to keep the mother healthy as well as help in milk production. Across the blocks it was observed that all AWCs were providing assistance related to health and nutrition except B.K. Pora. Statistically, a highly significant ( $p<0.001$ ) difference in responses related to this aspect across the blocks was seen.

## **4. CONCLUSION**

ICDS represents one of the world's largest programmes for early childhood development right from the day of inception i.e., when the baby is in the womb. This programme is critical for extending outreach and increasing access to services and also helps in intersect oral co-ordination with appropriate training and sensitization among field Functionaries, to facilitate dissemination of integrated reproductive and child health services to village and household level. Anganwadi centers are key outlets of ICDS project and Anganwadi workers perform various activities assigned to them, their education level and knowledge of nutrition plays an important role related to their performance in the Anganwadi centre. The present study divulge that, although the workers are performing their duty at their best, but the antenatal care, postnatal care, and nutritional anemia, weight monitoring were not up to mark and not satisfactory, it is just because all the workers

were not qualified and were not having much knowledge that is required to educate the beneficiaries. The beneficiaries are either referred to hospitals or concerned health centers. The only intervention that is being provided fully at Anganwadi centers is that of maintaining the immunization cards of pregnant women and nutrition is provided to them. However, the intervention provided by these centers to improve the knowledge of women beneficiaries related to care and nutrition during pregnancy and nursing is insufficient, a big gap exists there, where either partial intervention is provided or no intervention at all, which need to be addressed with priority concern and attention by ICDS centres. In order to fill this gap intervention programmes need to be planned and organized and substantial research needed, and more over only well qualified AWWs need to be appointed in order to build up the health and nutrition component of the center. Furthermore, on the basis of obtained information based on responses of women beneficiaries, it can be concluded that across the blocks B.K Pora is performing better in providing intervention, followed by Budgam, Chadoora and Nagam respectively.

Moreover, there is a need for improvement in methods of intervention. The method of intervention should include visual aids with proper demonstration, that can have lasting impact on the minds of beneficiaries to follow the advice.

And it is necessary that the training be provided to Anganwadi workers particularly apprising them regarding the importance of weight monitoring during pregnancy, importance of nutrition and caloric value of different foods, and other precaution to be taken during pregnancy.

### COMPETING INTERESTS

Authors have declared that no competing interests exist.

### REFERENCES

1. Park K. Park's text book of preventive and social medicine. M/s Banarsidas Bhanot Publishers, Jabalpur, India. 22<sup>nd</sup> Edition. 2013;546-547.
2. Kinra S, Sarma KVR, Ghafoorunissa Mendum VVR, Radhakrishnan R, Vishwanathan M, Wilkinson IB, Cockcroft JR, Smith GD, Shlomo YB. Effect of integration of supplemental nutrition with public health programmes in pregnancy and early childhood on cardiovascular risk in rural India Adolescents: Long Term Follow Up of Hyderabad Nutrition Trial; 2008.
3. Asha KP. Efficiency of anganwadi centres- A study in Thiruvananthapuram District, Kerala. Journal of Academia and Industrial Research. 2014;3(3):132-136.
4. Report 2009-10 Impact Assessment of ICDS in Madhya Pradesh Centre for Advanced Research & Development (CARD) Sambodhi Research Submitted to Poverty Monitoring and Policy Support Unit (PMPSU), State Planning Commission; 2009-2010.
5. Programme Evaluation Organization (PEO). Evaluation report on ICDS Jammu and Kashmir. Planning Commission of India, New Delhi. 2009;2:12,20.
6. UNICEF. Progress for children report- A Statistical Review; 2007. Available:<[http://www.unicef.org/India/media\\_3766.htm](http://www.unicef.org/India/media_3766.htm)> (Retrieved April 10, 2013)
7. Ramchandran V. Reflection of ICDS. Paper publication in seminar web edition. Reclaiming Childhood. 2005;564:1-8. Available:<<http://www.india-seminar.com>> (Retrieved April 10, 2013)
8. Dash NC. Evaluation of ICDS programme in the State of Orissa. Research Abstracts on ICDS 1998-2009. Centre for Rural Development, Bhubaneshwar; 2006.
9. Chudasama RK, Kadri AM, Joshi N, Bholan C, Zalavadiya D, Vala M. Evaluation of supplementary nutrition activities under integrated child development services (ICDS) at Anganwadi centres of different districts of Gujarat. Online J Health Allied Scs. 2013;12(3):1. Available:URL:<<http://www.ojahs.org/issue4/7/2013-3-1.html>>

© 2017 Ghani and Dhingra; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

#### Peer-review history:

The peer review history for this paper can be accessed here:  
<http://sciencedomain.org/review-history/20021>