



International Journal of Physical and Social Sciences

(ISSN: 2249-5894)

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
<u>1</u>	Malaysia Ministry of Education's Selection of Poems for the Form Four and Form Five New Literature Component. Dr. Chew Fong Peng and Ms Tan Li Chin	<u>1-23</u>
<u>2</u>	An investigation into motivation techniques used by the University of Zimbabwe administration to retain staff: 2008-2010. Tendai Douglas Svtowa, Freddie P Mupambireyi and Samuel M Gumbe	<u>24-58</u>
<u>3</u>	Dutifulness and Social Responsibility of School Teachers. Armin Mahmoudi	<u>59-71</u>
<u>4</u>	Small and Medium Enterprises (SMEs): A Promising Sector for Sustainable Development in Bangladesh. Md. Nazmul Haque	<u>72-91</u>
<u>5</u>	Managing High Performance in Business Organisations: Components of Excellence. L. P. Padhy	<u>92-114</u>
<u>6</u>	The White Tiger. Aravind Adiga	<u>115-123</u>
<u>7</u>	A study on Safety and Health provision that act as a drive force for the Employees in manufacturing sectors. Dr. S. Chitra Devi, Dr. K. J. Renuka and Anand.J	<u>124-139</u>
<u>8</u>	Nature Of Job And Occupational Stress: A Study Of Workers Of An Industry. Dr. Syed Khalid Perwez and Dr. Abdul Khalique	<u>140-170</u>
<u>9</u>	Effect of Flyash on the Properties of Waste Plastic Fibre Reinforced Concrete - An Experimental Investigation. Dr. Prahallada M. C. and Dr. Prakash K.B.	<u>171-191</u>
<u>10</u>	Ethnical upshots on senior citizen finance in India - An empirical study on reverse Mortgage- need and challenges. Prof. Suresha B and Dr. Gajendra Naidu	<u>192-212</u>
<u>11</u>	Competitive Advantage and Human Resource Treasures; the Perils Attached with Ignorance of Tacit Knowledge in 21st Century. Dr Tripurari Pandey	<u>213-234</u>
<u>12</u>	A study on Role of Literacy on dietary pattern among pregnant women in rural areas of Aligarh, U.P. Dr. Saba Khan and Farhat Jahan	<u>235-248</u>
<u>13</u>	Emotional Intelligence Explores Human Resources as Social Capital. Dr. J. Venkatesh and Mr. D. Balaji	<u>249-264</u>
<u>14</u>	Globalization: Its Impact On The Composition And Growth Of India's Foreign Exchange Reserves With Special Reference To Capital Inflows And Outflows, Full-Convertibility And Optimum Level Of Foreign Exchange. Dr. Hala Raman	<u>265-296</u>
<u>15</u>	A Study On Transform Stress Factors Related To The Strategies To Cope With Of Employees In Selected Textile Industries In South India. Dr. G. Sakthivel	<u>297-317</u>
<u>16</u>	Investment Analysis And Portfolio Construction. Dr. B. Revathy and N. Suthendren	<u>318-335</u>

Chief Patron

Dr. JOSE G. VARGAS-HERNANDEZ

Member of the National System of Researchers, Mexico

Research professor at University Center of Economic and Managerial Sciences,
University of Guadalajara

Director of Mass Media at Ayuntamiento de Cd. Guzman

Ex. director of Centro de Capacitacion y Adiestramiento

Patron

Dr. Mohammad Reza Noruzi

PhD: Public Administration, Public Sector Policy Making Management,
Tarbiat Modarres University, Tehran, Iran

Faculty of Economics and Management, Tarbiat Modarres University, Tehran, Iran

Young Researchers' Club Member, Islamic Azad University, Bonab, Iran

Chief Advisors

Dr. NAGENDRA. S.

Senior Asst. Professor,

Department of MBA, Mangalore Institute of Technology and Engineering, Moodabidri

Dr. SUNIL KUMAR MISHRA

Associate Professor,

Dronacharya College of Engineering, Gurgaon, INDIA

Mr. GARRY TAN WEI HAN

Lecturer and Chairperson (Centre for Business and Management),

Department of Marketing, University Tunku Abdul Rahman, MALAYSIA

MS. R. KAVITHA

Assistant Professor,

Aloysius Institute of Management and Information, Mangalore, INDIA

Dr. A. JUSTIN DIRAVIAM

Assistant Professor,

Dept. of Computer Science and Engineering, Sardar Raja College of Engineering,
Alangulam Tirunelveli, TAMIL NADU, INDIA

Editorial Board

Dr. CRAIG E. REESE

Professor, School of Business, St. Thomas University, Miami Gardens

Dr. S. N. TAKALIKAR

Principal, St. Johns Institute of Engineering, PALGHAR (M.S.)

Dr. RAMPRATAP SINGH

Professor, Bangalore Institute of International Management, KARNATAKA

Dr. P. MALYADRI

Principal, Government Degree College, Osmania University, TANDUR

Dr. Y. LOKESWARA CHOUDARY

Asst. Professor Cum, SRM B-School, SRM University, CHENNAI

Prof. Dr. TEKI SURAYYA

Professor, Adikavi Nannaya University, ANDHRA PRADESH, INDIA

Dr. T. DULABABU

Principal, The Oxford College of Business Management, BANGALORE

Dr. A. ARUL LAWRENCE SELVAKUMAR

Professor, Adhiparasakthi Engineering College, MELMARAVATHUR, TN

Dr. S. D. SURYAWANSHI

Lecturer, College of Engineering Pune, SHIVAJINAGAR

Dr. S. KALIYAMOORTHY

Professor & Director, Alagappa Institute of Management, KARAIKUDI

Prof S. R. BADRINARAYAN

Sinhgad Institute for Management & Computer Applications, PUNE

Mr. GURSEL ILIPINAR

ESADE Business School, Department of Marketing, SPAIN

Mr. ZEESHAN AHMED

Software Research Eng, Department of Bioinformatics, GERMANY

Mr. SANJAY ASATI

Dept of ME, M. Patel Institute of Engg. & Tech., GONDIA(M.S.)

Mr. G. Y. KUDALE

N.M.D. College of Management and Research, GONDIA(M.S.)

Editorial Advisory Board

Dr. MANJIT DAS

Assistant Professor, Deptt. of Economics, M.C.College, ASSAM

Dr. ROLI PRADHAN

Maulana Azad National Institute of Technology, BHOPAL

Dr. N. KAVITHA

Assistant Professor, Department of Management, Mekelle University, ETHIOPIA

Prof C. M. MARAN

Assistant Professor (Senior), VIT Business School, TAMIL NADU

Dr. RAJIV KHOSLA

Associate Professor and Head, Chandigarh Business School, MOHALI

Dr. S. K. SINGH

Asst. Professor, R. D. Foundation Group of Institutions, MODINAGAR

Dr. (Mrs.) MANISHA N. PALIWAL

Associate Professor, Sinhgad Institute of Management, PUNE

Dr. (Mrs.) ARCHANA ARJUN GHATULE

Director, SPSPM, SKN Sinhgad Business School, MAHARASHTRA

Dr. NEELAM RANI DHANDA

Associate Professor, Department of Commerce, kuk, HARYANA

Dr. FARAH NAAZ GAURI

Associate Professor, Department of Commerce, Dr. Babasaheb Ambedkar Marathwada University, AURANGABAD

Prof. Dr. BADAR ALAM IQBAL

Associate Professor, Department of Commerce, Aligarh Muslim University, UP

Dr. CH. JAYASANKARAPRASAD

Assistant Professor, Dept. of Business Management, Krishna University, A. P., INDIA

Technical Advisors

Mr. Vishal Verma

Lecturer, Department of Computer Science, Ambala, INDIA

Mr. Ankit Jain

Department of Chemical Engineering, NIT Karnataka, Mangalore, INDIA

Associate Editors

Dr. SANJAY J. BHAYANI

Associate Professor, Department of Business Management, RAJKOT, INDIA

MOID UDDIN AHMAD

Assistant Professor, Jaipuria Institute of Management, NOIDA

Dr. SUNEEL ARORA

Assistant Professor, G D Goenka World Institute, Lancaster University, NEW DELHI

Mr. P. PRABHU

Assistant Professor, Alagappa University, KARAIKUDI

Mr. MANISH KUMAR

Assistant Professor, DBIT, Deptt. Of MBA, DEHRADUN

Mrs. BABITA VERMA

Assistant Professor, Bhilai Institute Of Technology, DURG

Ms. MONIKA BHATNAGAR

Assistant Professor, Technocrat Institute of Technology, BHOPAL

Ms. SUPRIYA RAHEJA

Assistant Professor, CSE Department of ITM University, GURGAON

Title

**A STUDY ON ROLE OF LITERACY ON DIETARY
PATTERN AMONG PREGNANT WOMEN IN RURAL
AREAS OF ALIGARH, U.P.**

Author(s)

Dr. Saba Khan

Assistant professor,

Home science Department,

AMU, U.P., Aligarh.

Farhat Jahan

Research scholar,

Home science Department,

AMU, U.P., Aligarh.

Abstract:

Objectives: A survey based study on rural areas of Aligarh District, Uttar Pradesh (U.P.) India was conducted to assess the role of literacy on dietary practices among pregnant women, and misconception regarding dietary intake during pregnancy **Study Design:** For the purpose of the study, a self prepared structured interview schedule was used to collect the qualitative information **Study Area:** Ten villages of rural areas of Aligarh district (Uttar Pradesh) India were selected. **Sampling Technique:** Purposive random sampling. **Study Unit:** Five hundred pregnant women, with mean age were 26.19 years were selected as a target group. **Data Analysis:** Nutrient intake was compared with Indian Council of Medical Research (ICMR), and Recommended Dietary Allowances (RDA). Percentage method is used to assess the food fads and literacy level. **Results:** In the study areas energy releasing nutrients and protein rich foods are more consumed consciously among literate pregnant women as compared to illiterate pregnant women. Mostly the illiterate pregnant woman follows the food fads. **Conclusion:** Literacy level assumed a special significance in the Indian context because the problem of malnutrition in India is mainly due to ignorance, poverty, and lack of knowledge which is mainly governed by social taboos.

Key Words: Literacy, pregnant women, dietary pattern, rural areas.

Introduction:

The Indian Govt. has expressed a strong commitment towards education for all; however, India still has one of the lowest female literacy rates in Asia. In 1991, less than 40% of the 330 million aged 7 and over were illiterate, which means today there are over 200 million illiterate women in India. This low level of literacy not only has negative impact on women's lives but also on their families' lives and on their countries economic development. Literacy, as defined in census operations is the ability to read and write with understanding in any language. Nutrition intake in pregnancy is among one of the many factors associated with Low Birth Weight (LBW) babies in developing countries ^[1]. Nutritional needs increase during pregnancy, especially in the second and third trimesters of pregnancy ^[2]. In respect of weight; Indian Council of Medical Research

(ICMR) reported pregnant maternal weight below 40 kg has greater impact on low-birth-weight in all the Income groups. Since low maternal weight is an indicator of maternal nutritional status, one can assume that poor energy intake in pre pregnancy status has a greater impact on the weight. Weight gain during pregnancy may be a much better indicator of foetal growth. Nutritional needs increase during pregnancy especially in the second and third trimesters of pregnancy. Nutritional counseling to mothers early in pregnancy can help improve dietary intake during pregnancy. Studies indicated that more than 70% of women suffer from nutritional anemia & night blindness as a specific complaint^[3]. Dietary practices, especially in children, pregnant women, are often governed by social taboos based on food fads. This paper aims to study the dietary pattern of pregnant women of rural areas of Aligarh district (Uttar Pradesh) India, discussing the various parameters related to their diet, i.e. literacy level, food consumption and meal patterns, foods discarded during pregnancy and food fads they follow.

Material and Methods:

The study was conducted in the rural areas of Aligarh district (27° 29" to 28° 11" North latitude and 77° 29" to 78° 38" east longitudes), which is one of the important district in North India. The district has been divided into five tehsils namely Koli, Atrauli, Khair, Iglas and Gabhana. These tehsils have been subdivided into 12 blocks namely Dhanipur, Lodha, Akrabad, Jawan, Gabhana, Atrauli, Bijauli, Gangiri, Khair, Tappal, Chandaus, Gonda and Iglas and spreads over 1,212 villages. The study has been conducted at Jawan block of Aligarh district is situated on Diwai road; seventeen kilometers away in North from district headquarter. Jawan block lies under 'Gabhana Tahseel' but some villages of this block lie under Koil Tahseel. Area covered by this block is 286.6 km sq which shares 7.74 percent of district area. The villages are well connected by road. The educational institutions include schools which are about 1-5 Km from the villages, and colleges that are about 15-30 Km from villages. A total of 500 Pregnant women were selected on the basis of study purposive random sampling from the antenatal registers available with female workers (anganwari workers) at a village-based Integrated Child Development Services (ICDS), the names of pregnant women were listed out. At pilot visit, the investigator explained the purpose of the study to the pregnant women and took their informed consent. Pregnant women were interviewed in their houses by the researcher using a structured pre-tested

questionnaire. It is used to assess literacy level of women according to National Literacy Mission (NLM) norms, occupation of women, socioeconomic factors, and dietary intake in the last 24 hrs, and food fads during pregnancy. The dietary assessment of pregnant women was done by assessing the dietary intake from waking up in the morning up to going to bed at night. Standard containers and weights were used to measure the quantity of intake of cooked food. At each visit, standard dietary advice was given to these antenatal women. Energy intake in terms of kilocalories per day and protein intake in terms of grams per day was calculated at the time of analysis. The nutritional value of food items was reported as per Indian Council of Medical Research (ICMR) dietary tables ^[4]. By using SPSS windows version 16.0 statistical analysis including the food fads and literacy level was carried out.

Result:

Demographic profile: Out of the 500 subjects the higher percentage of respondents belongs to age below 20 years (48%), 38% of them from 20-25 years and 14% from 25-30 years. 386 women belonged to nuclear family and rest 114 lived in joint family. More than half 332 (66.4%) of the women were working and 168 (33.6%) women were not working and they were housewives with husbands working as laborers, rickshaw pullers, tempo driver, shop keeper, factory worker, fruit and vegetable seller etc, most of the women were engaged in income generating activities. More than half of the samples (53%) belong to income range of Rs 2000-3000, 32% from Rs 1000-2000, 15% from Rs. 500-1000.

Literacy Profile: Literacy for women is necessary for an understanding and control over social, personal and economic conditions. It acts as a facilitator for improving their quality of life. The National Literacy Mission (NLM) is a step towards eradication of illiteracy in the age group of 15-35 years by the year 1988. According to National Literacy Mission (1998) literacy can be defined as the ability to read and write in the mother tongue, or in the national language where cultural and political realities may also demand ^[5]. For the present study the literacy level is assessed according to the NLM norms.

Table 1 shows that more than half (69.2) % of the women were literate, out of which 47% could only read the given sentence with in 7wpm (word per minute), 10.8% could write the given

sentence in 7wpm without understanding, only 5.6% were able to write the sentence with understanding only and 5.8% were able to read and write the given sentence with understanding.

Dietary Intake:

The intake of cereals was 365 g and 362 g respectively in Literate women (who can read and write with understanding) and illiterate rural pregnant women (Table2). Except for other vegetables and roots and tubers, the intake of all the other foods was lower than the suggested level as described by ICMR. The intake of milk, oils and fats was higher in literate women than in illiterate pregnant women. The intakes of all the nutrients were lower in illiterate than the recommended levels suggested by ICMR in pregnant women (Table 3). The deficit was more with respect to micronutrients such as iron, vitamin A, thiamin, and Vit C. The deficit in energy intake and protein was more among illiterate than literate pregnant women in rural areas. As mostly the literate women consumed missi roti (whole-wheat flour + chana flour chapatti) with onion chutney a traditional Indian diet, whereas the illiterate women consumed mostly bread with tea in breakfast. Rice with tuar or lentil dal was consumed in lunch and at dinner by literate pregnant women. Women who consumed less than 1500 kcal/day, have inadequate dietary intake, more often hidden hunger during pregnancy and lactation period.^[6] Foods especially eaten by the respondent during pregnancy were reported to be milk, egg, ghee, and moongdal. It reveals that more than fifty percent of pregnant women were not aware about their nutritional value of their diet. The reason behind this fact was illiteracy and ignorance regarding the nutritive value of foods. According to the surveys conducted by the National Institute of Nutrition, Hyderabad, about 40% of the rural households in India did not meet their caloric requirements^[7]. Vitamin A is also present in milk and milk products, as well as egg yolks.^[4]

Faulty feeding practices and taboos

In India, pregnant women often eat less (when they need to eat more) for the fear of the baby becoming too big and causing problems during labour. This fear is understandable, since most Indian women have a small stature and untrained birth attendants often conduct deliveries. Banana eating is believed to produce single-child infertility, since the banana tree fruits only once. Though prolonged breast-feeding is routinely done (and needs to be encouraged), it is not initiated within one hour after birth, as it is recommended by World Health Organisation (WHO).

Table 4 shows that the pregnant women are denied good food due to false beliefs. Food fads are mostly followed by illiterate women (26%) and the women who are able to only read (17.6%). Papaya, a rich source of *b*-carotene (vitamin A) is considered to be an abortifacient and is banned. It was found that most of the respondents dislike non vegetarian foods. Some of the food like papaya jack fruit is omitted by most of the respondents because of the food fads. Most of the women were anemic because they are not consuming sufficient green leafy vegetable and other seasonal fruits and vegetable rich in iron as well as meat. ^[8]

Discussion: The literacy profile of rural pregnant women in the study area was 69.2% literate, and 30.8% illiterate. The present study brings out a few important observations about dietary pattern among rural women of U.P. India. The food habits of the subjects were simple with 2 main-meal day- pattern. There were wide variations in the consumption of different foods by the subjects and no alteration in food habits during pregnancy was seen. The dietary intake of rural pregnant women was lower than the recommended level. ^[9] There was a significant amount of almost all the food groups consumed among the literate pregnant women as compared to illiterate pregnant women. The vegetables like tomatoes, potatoes and green leafy vegetables like amaranth, spinach bhaji were consumed in small quantities. Seasonal fruits like banana, guava jamun and mangoes were consumed occasionally. Soybean oil and mustard oil were used as main cooking oil. Protein rich foods like eggs, milk and poultry foods were consumed occasionally, as such food items are expensive and these families cannot afford to purchase them. The values of food, dietary practices, especially among vulnerable group (pregnant women) are often governed by social taboos based on food fads. Food fads and misconception regarding dietary intake during pregnancy is very common due to various traditional practices and habits leading to its prevalence in the community.

References:

- Kramer MS. Determinants of low birth weight: Methodological assessment and Meta analysis. Bull World Health Organ 1987; 65:663-737.
- World Health Organisation. Technical Report Series No. 522, 1972.

- Kulkarni AV. Anemia as a Life – Long Problem of Indian women: A study of Maharashtra. Women's Link 2007; 13(4):12 – 15.
- Gopalan C, Kaur S. Women and Nutrition in India. Nutrition Foundation of India. Special Publication Series 1989, No.9.
- Towards A Literate India, 1996, NLM, Ministry of HRD, New Delhi.
- Rao K M, Balakrishna N, Arlappa N, Laxmaiah A, Brahman G N V. Diet and Nutritional Status of Women in India. J Hum Ecol 2010; 29(3):165-170.
- National Nutrition Monitoring Bureau 2003. Prevalence of micronutrient deficiencies. NNMB Report No.22.Hyderabad: National Institute of Nutrition.
- M.Mehrotra, Tiwari.S. A Study of Dietary Pattern of Pregnant Women of Hrahua block of Varanasi. Indian J.Prev.Soc.Med 2008; 39(1&2):83-85.
- Jood S, Bishnoi S, Khelarpaul N. Nutritional status of rural pregnant women of Haryana State, North India. Nutritional Health 2002; 16:121-131.

Table 1: Literacy Level of women as per NLM norms:

Literacy Level	No. of respondents	%
Read and write with understanding	29	5.8
Writing with understanding	28	5.6
Writing only	54	10.8
Read only	235	47.0
Illiterate	154	30.8
Total	500	100

Table 2: Average consumption of food stuffs (g/day) among pregnant rural women (above 18 years):

Literacy level	n	Cereals	Pulses	GLV*	Other veg	Roots and tuber	Fruits	Meat	Milk	Oils and fats	Sugar and Jaggery
Read and write with understanding	29	365	27	18	52	50	26	24	29	9	17
Writing with understanding	28	364	25	18	53	51	26	23	28	8	17
Write only	54	363	25	17	50	50	25	20	20	8	16
Read only	235	363	24	17	50	48	24	19	19	7	15
Illiterate	154	362	24	16	49	47	23	17	17	7	15

* Green Leafy vegetables

Table 3: Average intake of nutrients (per day) among pregnant rural women (above 18 years)

Literacy level	n	RD A	Energy (kcal)	Protein (Gm)	Total Fat(gm)	Calcium (mg)	Iron (mg)	Vit A (µgm)	Thiamin	Vit C
			2175	65	-	1000	38	600	1.1	40
Read and write with understanding	29		1875	54	16.7	432	30	435	0.7	36
Writing with understanding	28		1886	53	15	394	26	289	0.7	30
Write only	54		1825	43	13	383	26	283	0.5	25
Read only	235		1793	35	15	365	25	275	0.4	25
Illiterate	154		1773	43	19	352	22	111	0.4	26

Table 4: Percentage Distribution of Literacy level and Foods fads among pregnant women:

Literacy level	Food Fads among pregnant women					
	follow		Not follow		Total	
	No	(%)	No	(%)	No	(%)
Read and write with understanding	7	1.4	22	4.4	29	5.8
Writing with understanding	3	0.6	25	5	28	5.6
Write only	11	2.2	43	8.6	54	10.8
Read only	88	17.6	147	29.4	235	47
Illiterate	130	26	24	4.8	154	30.8
Total	239	47.8	261	52.2	500	100