

MALNUTRITION OF RURAL CHILDREN DUE TO LOW INCOME OF PARENTS: A CASE STUDY OF FAISALABAD DISTRICT

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ABSTRACT

A Study was conducted in district Faisalabad during the year 2016. The research was focused on the impact of parents' income on nutrition of children in rural areas of district Faisalabad. Two union councils were selected randomly then four villages were further selected randomly. Total sample size of 120 respondents (30 from each village) were selected by simple random technique. Data were collected through a well-designed interview schedule and analyzed by using descriptive and inferential statistical techniques. More than a half of the respondents had knowledge about availability of food as their basic rights. A substantial proportion of the respondents reported that they spent almost half a year without sufficient food and to have some nourishment for their children they decrease their own meal size or skipped one meal in a day. Respondents also reported that they could not manage balanced meal for their children, because they could not afford it. Major reason of food insecurity in children was poverty. Only one-third of respondents were satisfied with the quality of available food.

KEYWORDS: Malnutrition; Poverty; nutrition; Pakistan.

INTRODUCTION

Mal nutrition refers to insufficient supply of protein to human body. In social sciences it refers to a social setup that is unable to provide basic sustenance to the inhabitants. In sociology malnutrition usually referred to food insecurity due to its specific character. It can be said that both malnutrition and food insecurity are inevitable to each other and both gush out from lack of money. Food insecurity is associated with 'threat of hunger' and more likely succumb the victims to malnourished (2). Malnutrition and food insecurity can't be synonym but having a strong causal relationship. For more comprehension it

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can be said that malnutrition has a tripod character; irregular for supply, low or no access on food and poor distribution of food (United Nations Statement on Food Security in Pakistan, 2000).

Nutrition and health scoring is deeply linked. Health comprises three basic pillars (i) physical, (ii) mental and (iii) communal health. Physical as well as mental and communal health depend on proper nutrition (3). Nutrition is a primary and basic human need which also require appropriate amount of water, shelter, education and health care. Proper intake of nourishment is prerequisite for physiological and emotional development (5). It has been deeply observed that adverse consequences of lack of proper nutritive food results into chronic sickness and internalized behavior problems especially in elementary school gaining children (8, 15).

Millennium development goals (MDGS) give maximum importance to the issue of Malnutrition. MDGs cut the cord of malnutrition through reduction in poverty that shall positively affect the food security. It is now established fact that economic growth mutually interacts with nutrition; and to accelerate the development process a full deal of calories is essential (13). where people are not getting maximum or needed nutrition how they will contribute into the process of economic growth (Pinstrup-Anderson, 2009)? Hence the issue being pointed out in this paper is fundamental component of any sort of development (6). In spite of all the significance of issue, many opposing factors are playing their role that is inversely affecting on all the struggle to get rid of malnutrition (14). In this scenario Pakistan is not an exception and suffering through all the problems mentioned. In order to get rid, Pakistan ought to formulate a comprehensive policy that must be addressing all the relevant aspects and stakes. Adoption of new technology, effective extension services and true data can only help achieve the goal and cope the problem of malnutrition. Nevertheless, huge financial aid by the multi national donors and governments can assure the success.

A developing country like Pakistan mostly depends on agricultural sector which provides food items for its growing its population which is increasing day by day @ 3 percent in 2009-10 and still raising with high ratio and expected to be doubled by the year 2050. More than one third population of Pakistan is directly and indirectly linked with agricultural sector and depends on this sector for their livelihood (1). The developing countries face both demand and supply side issues. Pakistan is also facing two issues i.e. food production due to poverty and access to food in rural and urban areas .It is most difficult target to control this alarming situation in these areas. In

Pakistan now many agencies, agricultural development institutes and their agents are working to motivate the traditional farmers to adopt new technology, new seeds and fertilizers. The present research focused on the prevalence of malnutrition of rural children of district Faisalabad due to economic status of their parents.

MATERIALS AND METHODS

This study was conducted in district Faisalabad. Through random sampling technique, two union councils of district Faisalabad were selected. Then a sample of 120 respondents (30 respondents from four selected villages each) were drawn using the same technique (simple random). Data were collected using a well structured interview schedule comprising both close end and open ended questions. Pretesting of instrument for the sake of preemptive measure against any possible error was carried out; it ensured the desirous level of validity and reliability of the interview schedule. The information was by default (due to structured questionnaire) received in classified form. Averages and percentages were calculated to measure central tendencies while dispersion of the responses was measured through standard deviation. To study the effect and relationship between the variables Bivariate analysis was used. In addition, to check the direction and strength of relationship chi-square was applied. The same tests also helped to test the hypotheses. Gamma test also used to verify and check the results.

RESULTS AND DISCUSSION

The data (Table 1) clearly depict that 20.8 percent of total sampled respondents had 1-2 children, while nearly one-third i.e. 32.5 percent of them had 3-4 children, more than one-third i.e. 38.3 percent of them had above 4 children.

Table 1. Data about total number of children of the respondents.

No. of children	Frequency	Percentage
1-2 children	25	20.8
3-4 children	39	32.5
Above 4 children	46	38.3
NA (unmarried)	10	8.3
Total	120	100.0

The results also (Table 2) depicts that about one-third i.e. 33.3 percent of respondents had up to Rs. 10000 monthly income from all sources, while

35.0 percent of them had Rs. 10001-20000 monthly family income and 31.7 percent of them had above Rs. 20000 monthly family income from all sources.

Table 2. Data about the monthly income of the respondents

Monthly income from all sources (Rs.)	Frequency	Percentage
Up to 10000	40	33.3
10001-20000	42	35.0
Above 20000	38	31.7
Total	120	100.0

Table 3. Did the respondents had wheat for the whole year or not

Wheat for whole year	Frequency	Percentage
Yes	42	35.0
No	78	65.0
Total	120	100.0

The data (Table 3) further indicate that about one-third i.e. 35.0 percent of the respondents had wheat for whole year, while 65.0 percent of them never had wheat for whole year.

Table 4. Frequency distribution of the respondents according to time when they either eat less or do not eat due to lack of money.

Response	Frequency	Percentage
Oftenly	20	16.7
Sometime	53	44.2
Never	47	39.2
Total	120	100.0

The results showed (Table 4) depicts that 16.7 percent of respondents reported that in the last 6 months, they or other adults in the household oftenly cut the size of their meals or skip meals because there was not enough money for food. A major proportion i.e. 44.2 percent of the respondents reported that in the last 6 months, they or other adult in the household sometime ate less or skipped food only because of not having enough money for food, whereas 39.2 percent of them told that they had never eaten less or skipped food only because of not having enough money to have food.

Table 5. Reasons for not providing good quality of food to their children.

Reasons	To a great extent		To some extent		Not at all		NA	
	F	%	F	%	F	%	F	%
Accessibility	43	35.8	13	10.8	15	12.5	49	40.8
High prices	40	33.3	28	23.3	3	2.5	49	40.8
Low income	30	25.0	21	17.5	20	16.7	49	40.8
Large family size	35	29.2	14	11.7	22	18.3	49	40.8
No purchasing power	34	28.3	22	18.3	15	12.5	49	40.8

The data (Table 5) further indicate that more than one-third i.e. 35.8 percent of the respondents were agreed 'to a great extent' and 10.8 percent of them were agreed 'to some extent' that lack of accessibility of good quality they could not provide good quality food to their children, while 12.5 percent of them never agreed with this reason. About one-third i.e. 33.3 percent of the respondents were agreed 'to a great extent' and 23.3 percent of them were agreed 'to some extent' that due to high prices of good quality they could not provide good quality of food to their children, while only 2.5 percent of them never agreed with this reason.

About one-fourth i.e. 25.0 percent of the respondents were agreed 'to a great extent' and 17.5 percent of them were agreed 'to some extent' that due to low income of good quality they could not provide good quality of food to their children, while 16.7 percent of them never agreed with this reason.

More than one-fourth i.e. 29.2 percent of the respondents were agreed 'to a great extent' and 11.7 percent of them were agreed 'to some extent' that due to large family size, they could not provide good quality of food to their children, while 18.3 percent of them never agreed with this reason.

More than one-fourth i.e. 28.3 percent of the respondents were agreed 'to a great extent' and 18.3 percent of them were agreed 'to some extent' that due to no purchasing power, they could not provide good quality of food to their children, while 12.5 percent of them never agreed with this reason.

Testing Of Hypotheses

Hypothesis 1. Age of the parents will be influencing the level of nutrition among children

The results (Table 6) describes clearly the strength of relation between age of the respondents and status of food insecurity among children. Chi-square

value shows a highly significant association between age respondents and status of food insecurity among children. Gamma value of data given above clearly depicts a very strong as well as positive association among the variables under study. It means low age respondents had less status of food insecurity on children as compared to high respondents. So the hypothesis "Age of the parents will be influenced on the status of food insecurity among children" is accepted.

Table 6. Relationship between age of the respondents and nutrition level of children

Age of the respondents (in years)	Nutrition level of Children			Total
	Low	Medium	High	
Up to 35	16	25	5	46
	34.7%	54.3%	10.8%	100.0%
36-45	6	26	8	40
	15.0%	65.0%	20.0%	100.0%
Above 45	5	10	19	34
	14.7%	29.4%	55.8%	100.0%
Total	27	61	32	120
	22.5%	50.8%	26.7%	100.0%

Chi-square = 44.87, d.f. 4, Significance = .000**, Gamma = .728, **Highly significant

Hypothesis 2. Education of the parents will be influencing the level of nutrition among children

Table 7. Relationship between education of the respondents and nutrition level of children

Education of the respondents	Nutrition level of Children			Total
	Low	Medium	High	
Illiterate	5	11	13	29
	17.2%	37.9%	44.8%	100.0%
Primary-Middle	5	18	5	28
	17.8%	64.3%	17.9%	100.0%
Matric-Intermediate	7	13	9	29
	24.1%	44.8%	31.1%	100.0%
Graduation and above	10	19	5	34
	29.4%	55.9%	14.7%	100.0%
Total	27	61	32	120
	22.5%	50.8%	26.7%	100.0%

Chi-square = 40.28, df. = 6, Significance = .002, Gamma = -.434, ** = Highly significant

The data (Table 7) clearly describes the strength of relationship between education of the sampled respondents and position of food insecurity among

their children. Chi-square value shows a highly significant association between education of the respondents and status of food insecurity among children. Negative value of Gamma represents negative relationship among the variables under study. It shows illiterate respondents had faced more food insecurity among their children as compared to literate respondents. So the hypothesis “Education of the parents will be influenced on the status of food insecurity among children” is accepted.

Hypothesis 3. Economic status of the parents will be influencing the nutritional value of children

Table 8. Relationship between income of the respondents and nutrition level of children.

Income of the respondents (Rs.)	Nutrition level of Children			Total
	Low	Medium	High	
Up to 10000	5	18	17	40
	12.5%	45.0%	42.5%	100.0%
10001-20000	8	24	10	42
	19.1%	57.1%	23.8%	100.0%
Above 20000	14	19	5	38
	36.8%	50.0%	13.2%	100.0%
Total	27	61	32	120
	22.5%	50.8%	26.7%	100.0%

Chi-square = 48.64, df = 4, Significance = .000, Gamma = -.463, **Highly significant

The results (Table 8) further exhibits the association between income of the respondents under study and status of food insecurity among their children. Chi-square value shows a highly significant association between income of the respondents and status of food insecurity among children. The table further depicts negative gamma value which shows a negative relationship between the variables. This negative value means low income respondents faced more food insecurity among their children if compared to respondents having high income. So the hypothesis “Economic status of the parents will be influenced on the status of food insecurity among children” is accepted.

CONCLUSIONS

The results show that majority of the respondents agreed that children are malnourished mainly due to poverty followed by food insecurity. Respondents also agreed that they experience the effects of malnutrition on their child’s health, intellectual improvement, educational activities and social satisfaction. The bad phenomenon has also many effects on society i.e. crime, frustration,

discrimination and rate of mortality along with many other. Malnutrition is a cause of physical deficiencies in the children like normal height, weight, normal growth of child, activeness of child and it also affects the school achievements of the child. Malnutrition is also a cause of psychological deficiencies like inferiority, lack of confidence and aggressive behavior. On the basis of these results it can be concluded that malnutrition affected the children's health in rural areas of district Faisalabad.

REFERENCES

1. Anon. 2011.. 2011. Pakistan Economic Survey. 2009-10. Economic Advisor Wing, Finance Division, Government of Pakistan, Islamabad. *International Journal of Social Economics*, 31(8):753-766.
2. Anon. 2000. What is food insecurity. United States Development Authority. United Nation Texas Food Bank Network. Available at: <http://tfbn.org/food-insecurity/>
3. Brevik, E.C. 2008. Soil, food security and human health. Soils, plant growth and crop production, Vol. 3. *Encyclopedia of Life Support Systems (EOLSS)*.
4. Cook, J.T., D.A. Frank, C. Berkowitz, M.M. Black, P.H. Casey, D.B. Cutts, A.F. Meyers, N. Zaldivar, A. Skalicky, S. Levenson, T.Heeren and M. Nord. 2004. Food insecurity is associated with adverse health outcomes among human infants and toddlers. *J. Nutr.* 134(6):1432-8.
5. Cook, John T. and D.A. Frank. 2008. "Food Security, Poverty, and Human Development in the United States." *Annals of the New York Academy of Science* 1136:193–209.
6. Fullbrook, D. (2010) Food as Security. *Food Sec.* 2:5–20
7. Kleinman, R.E., J. M. Murphy, M. Little, M. Pagano, C. A. Wehler, K. Regal and M. S. Jellinek. 1998. "Hunger in children in the united states: potential behavioural and emotional correlates." *Paediatrics* 101:3–6.
8. Lina, S. 2008. In search of gender bias in household resource allocation in rural china. University of Nottingham- School of Sociology and Social Policy. IZA working paper No. 3464.
9. Margaret, A., M. Nord, G. Bickle and S. Carlson, 1999. Foo and Rural Economic Research Service, U.S. Department of Agriculture. Food Assistance and Nutrition Research Report, 8(FANRR-8): Fall 2000.
10. Pinstруп - Andersen, 2009. "Food Security: Definition and Measurement". *Food Security* 1 : 5 - 7 DOI 10.1007 / s 12571 – 008 - 0002-y
11. Strup, P.P., and Zezza. 2009. Household food security. Food security definition and measurement. *Food Sec* 2003, 1:5-7 DOI

- 10.1007/s12571-008-0002-y. Published online 21 January 2009 # Springer Science Business Media B.V. & International Society for Plant Pathology.
12. Timmer, C.P., 2004. Food Security and Economic Growth: Asian Perspective. Asian- Pacific Economic Literature, November.
 13. Vini, A., D. Wulandari and R. Etika. 2005. The role of woman on household food security in sleman daerah istimewa Yogyakarta. Department of agribusiness faculty of agriculture "UPNveteran" Yogyakarta.
 14. Weinreb, L., C. Wehler, J. Perloff, R. Scott, D. Hosmer, L. Sagor, and C. Gundersen. 2002. "Hunger: Its Impact on Children's Health and Mental Health." Pediatrics 110(4):e41.

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Rabia Ilyas	:	Helped in write-up