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Mental health of women in agriculture and productivity in agriculture

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Abstract

The pivotal role of the farm women involves activities within and outside the four wall of her home. A study was conducted to know the mental health of women in agriculture and the association with productivity of their land. The descriptive study was conducted with a sample of 120 farm women selected by two stage stratified sampling in the Amaniganj block of Faizabad (Ayodhya) district of Uttar Pradesh. The mental health check list of Dr. Promod Kumar was administered to examine the health status of the women in agriculture. The consolidated data analyzed revealed that mental health (MH) of the women was moderate poor (41.67%), good health (33.33%) and 25 per cent reported highly good MH. Most of the farm women aged 40-50 years had moderate poor MH. Women exclusively engaged in agriculture (34.17%) were found to have moderate poor MH (18.33%) and a few (5.83%) had highly good MH; Among 63.33% women engagement in farm operations along with household work were having moderate poor and good MH (23.33% each) and 16.67% had highly good MH. Women involved in sedentary farm operations had moderate poor MH (22.5%), good MH (16.67%) and rest (8.33%) had highly good MH but women involved in heavy farm operations had highly good MH (10%), good MH (33.33%) and 41.67% had moderate poor MH. Among the women who reported low and average productivity, majority were found to have moderate poor MH (40% and 66.66% respectively) and women in agriculture with high productivity had moderate poor and good MH (35.71% each) and 28.58% of the women with high productivity had highly good MH.

Keywords: Farm women, mental health, agriculture involvement, productivity

Introduction

It has been well recognized that agriculture is an engine of growth and poverty reduction and main occupation of the poor (Anriquez, 2010) [1]. Women have been the backbone of the agricultural workforce as they make essential contributions to agriculture and rural economics. The women in agriculture contribute in the food and nutrition security of her family. She is involved in almost all the fields of agriculture and allied sectors. Farm work entails rigorous physical labour in order to maintain the rural way of life. Maurya (1994) [3] noted that the normal work of peasant women in India starts well before dawn and does beyond the dusk. Anriquez (2010) [1] pointed out that their roles and involvement varies, rural women often manage complex household activities and pursue livelihood strategies. Praveen *et al.* (2005) [5] commented that the hard work of women has been unpaid while she does the most tedious and back-breaking tasks in agriculture, animal husbandry and homes.

Health is an important factor that contributes to human well-being and economic growth which is maintained and improved through application of health sciences, social and economic environment and lifestyle of the individuals.

Doss *et al.* (2011) [2] observed that the agriculture sector is underperforming in many countries because women who are often a vital resource in agriculture and the rural economy, face constraints that reduce their productivity. Moodie and Jenkins (2005) [4] reported that the mental health risk to women of living on a farm and direct involvement farming might include stressors such as the economic uncertainty of farming, low levels of jobs demand and control, lack of external recognition for their work, fatigue, emotional and social isolation, and trauma associated with injuries and functional impairments. Studies also showed that women consistently reported higher levels of mental distress with men, regardless of the residence. A

better understanding of the rural women's health problems is needed to identify appropriate targets interventions. Therefore, the study was undertaken to assess the mental health (MH) of agricultural women in rural areas and know the relation with productivity of their land.

Materials and Methods

The descriptive ex-post study was conducted in two villages namely Tindauli & Birauli Jham District Faizabad of Eastern U.P. which was purposely selected for its availability of sample. A sample size of 120 families from two villages (60 families each) were included in the study randomly based on the criteria that the woman is between the age of 20-50 years, married and not pregnant or lactating and they were involved in agriculture operations on their own field or other field taken on lease, for more than five hours a day on an average. Only one woman from each family, engaged in agriculture activities was selected. An interview schedule prepared to elicit information on the background information of the respondent and her family and productivity of the land was administered after pilot test and refinement. The mental health of the farm women was assessed through Mental Health Check List (MHC) (Hindi version) which was a standardized test by Dr. Pramod Kumar. The data on productivity of land, farm operations scores, household operations score were computed after giving due weighted score to the activities. The farm operation score of the individual farm woman was classified as sedentary, moderate and heavy and while household operation scores were classified as and high, average and low by calculating Mean \pm 2SE. The data collected was codified, scored, consolidated, tabulated and analyzed using Microsoft Excel and SPSS. The findings of the result were discussed.

Results and Discussion

Profile of the farm women and their family

The study found that majority of women working in agriculture (60.84%) were between the age 40-50 years, 24%

were of 30-40 years and 15 per cent were 20-30 years old with 82.5 per cent married and 17.5 per cent were widow. The Annual family income of majority of farm women was below 16200 (62.5%) followed by Rs 16200-30900 (28.33%) rest earned between Rs. 30900 to 75000 only.

Involvement of women in agriculture in farm operations and household activities

The involvement of women in agriculture in farm operations and household activities shown in Table 1 which revealed that based on the farm operation score, majority of farm women (47%) were involved in sedentary agriculture activities while 38.34 per cent were engaged in heavy work, rest of the women (14%) were doing average farm operations.

Table 1: nature of farm operations and household involvement of women in agriculture

Nature of farm operation	Involvement in Household work			Total
	Low	Average	High	
Sedentary	3 (2.5)	42 (35)	12 (10)	57 (47.5)
Moderate	0	17 (14.17)	0	17 (14.17)
Heavy	4 (3.33)	97 (80.83)	4 (3.33)	46(38.33)
Total	7 (5.83)	97 (80.33)	16 (13.33)	120 (100)

Figures in parenthesis indicate percentage

It was interesting to note that 80.83 per cent women were involved in heavy farm operations and average household work while 35 per cent of farm women were engaged in sedentary farm operations and average household work. There were a few farm women (3.33%) who had high involvement in both farm operations and household work.

Mental health of women in agriculture

The mental health of the farm women is presented in Table 2. It was revealed that majority of farm women had moderate poor mental health (41.67%), good mental health (33.33%) and highly good mental health (25%).

Table 2: Mental health of women in agriculture – age wise

Mental Health	Age of the women			Total N=120
	20-30 years (N=18)	30-40 years (N=29)	40-50 years (N=73)	
Moderate poor health	4 (22.22)	12 (41.38)	34(46.57)	50 (41.67)
Good health	10 (55.56)	11 (37.93)	19(26.03)	40 (33.33)
Highly good health	4 (22.22)	6 (20.69)	20 (27.40)	30 (25)
Total	18 (100)	29 (100)	73 (100)	120(100)

Table 2 further revealed that among majority of farm women aged 40-50 years old were having moderate poor health (46.57%), good mental health (26.03%) and highly good health (27.40%). The 30-40 years old farm women showed moderate poor mental health (41.38%), good mental health (37.93%) and highly good health (20.69%). Among 20-30 year old farm women the mental health was good (55.56%), highly good (22.22%) and moderate poor (22.22%). It was interesting to find that the more percentage of young farm women showed better mental health than the old group. It

shall be meaningful to further investigate the reason behind good mental health and conduct more extensive and comprehensive research to understand the changes in the agrarian families.

Household work and mental health

Farm women have been reported to perform household work along with the farm activities. The mental health of the farm women with respect to their involvement in household work has been put forth in Table 3.

Table 3: Involvement in household operations and mental health of women in agriculture

Household operation	Mental health									Total No(%*)
	Moderate poor health			Good health			Highly good health			
	No.	%*	%**	No.	%*	%**	No.	%*	%**	
No work (exclusive agriculture activities)	22	18.33	53.66	12	10	29.27	7	5.84	17.07	41 (34.17)
Average	0			0			3	2.5		3(2.5)
High	28	23.33	36.84	28	23.33	36.84	20	25	26.32	76 (63.33)

* overall percentage

** Percentage within level of household work

Table 3 revealed that among the total sample, majority of women in agriculture were involved in household operations (63.33%) while 34.17 per cent were exclusively involved in agriculture operations and reported that they did not participate in household work. A few women (2.5%) were involvement in household operations was average. Majority of farm women who had no involvement in household operations, the mental health was moderate poor (53.66%), good mental health (29.27%) and highly good health (17.07%). Among those farm women who had high involvement in household operations, an equal percentage (36.84%) of women were found to have moderate poor mental health and good mental health but interestingly 26.32 per cent of women with high involvement in household work showed highly good mental health. This calls for further research and

understanding that lead highly good health among farm women.

Farm operations and mental health of women in agriculture

Women reported their engagement in many agriculture operations varying from nirai (weeding), todai (vegetable harvesting), ropai (transplanting), Kudai (hoeing), Katai (crop harvesting), Pitai (manual threshing), Buwai (sowing), Gudai (digging), Sichai (irrigation) and Dawa Dalna (threshing). It was surprising to note that most of the farm operations done by women involved manual work and use of simple implements. Table 4 presents the mental health of farm women with respect to nature of farm operations done by them on an average.

Table 4: Farm operations and mental health of women in agriculture

Farm operation	Mental health			Total
	Moderate poor health	Good health	Highly good health	
Sedentary	27 (22.5)	20 (16.67)	10 (8.33)	57 (47.5)
Moderate	5 (4.17)	4 (3.33)	8 (6.67)	17 (14.17)
Heavy	18 (15)	16 (13.33)	12 (10)	46 (38.33)

Table 4 reflected that women involved in sedentary work (47.5%) were performing farming activities that they considered light in nature while 38.33 per cent did heavy farm operation scored through more number of farm activities performed and the nature of strength involved (as perceived by the farm women). Majority of the farm women were involved in sedentary work had moderate poor mental health (22.5%), good mental health (16.67%) and only a few (8.33%) had highly good mental health. The women involved in heavy farm operations 15 per cent had moderate poor mental health, good mental health (13.33%) and 10 per cent

had highly good mental health. Farm women engaged in moderate farm operations were found to have highly good mental health (6.67%), moderate poor mental health (4.17%) and a few (3.33%) had good mental health.

Productivity and mental health

Productivity of the land cultivated by the farm women was computed based on the agriculture produce obtained in the year of data collection and the area cultivated. The mental health of farm women with respect to level of productivity from cultivation is presented in Table 5.

Table 5: Productivity and mental health of women in agriculture

Mental Health	Productivity			Total N=120
	Low (N=80)	Average (N=12)	High (N=28)	
Moderate poor health	32 (40)	8 (66.66)	10 (35.71)	50 (41.67)
Good health	28 (35)	2 (16.67)	10 (35.71)	40 (33.33)
Highly good health	20 (25)	2 (16.67)	8 (28.58)	30 (25)
Total	80 (100)	12 (100)	28 (100)	120(100)

Among the women who reported low productivity majority were found to have moderate poor mental health (40%), good mental health (35%) and highly good health (25%). The mental health of farm women with average productivity were found to be moderate poor mental health (66.66%), rest had good health and highly good health (16.67 % each). It is appreciable to note that despite the moderate poor health the productivity of their land some women was average and high. Thus, it can be concluded that the farming families had very low annual income, women engaged in agriculture showed moderate poor to highly good mental health. productivity of the land of the farm family was low and majority had moderate mental health. It is recommended to conduct intensive and extensive research data collection understand the factors affecting productivity in a wholesome manner health specifically in relation to health of the family members and nature of work done by them.

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