



Lifestyle of Farming Community in Punjab: A Major Health Determinant

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ABSTRACT

The health status of the farming community and the various lifestyle factors which affect the health of the farming community is still an subject matter of less importance for researchers. The present study was aimed to find out the relationship of health with lifestyle of the farming community and data were collected using survey from a sample of 120 respondents from the farming community of Punjab, India during 2021. The overall health status was measured in terms of mental health status and physical health status. The lifestyle was measured through 8 parameters i.e. dietary diversity score, meal frequency, nutrition intake, physical activity, stress management, personal health habits, availing medical advice and substance abuse. The findings revealed that lifestyle was correlated with physical health, mental health as well as overall health. The results also showed that mental health, physical health and overall health of male respondents were better than female respondents. It was inferred that health was dependent on lifestyle. Therefore, there is need to create awareness and knowledge about importance of lifestyle among farming community.

INTRODUCTION

An undisturbed condition in physical health in the public is rare to find with the growing rates in various health problems. Most individuals are vulnerable to a number of health affecting conditions because of personal decisions and lifestyle changes (Sunitha & Gururaj, 2014). In many cases, lifestyle choices strongly act as the contributing factors to poor health. Lack of physical activity is considered to be a risk factor for cardiovascular diseases and other conditions. Poor eating habits are also a cause of concern. Balanced diet is important for maintaining a sound health and most of the rural household have lack of awareness about it and are found to be nutrient deficient (Gupta et al., 2019). Overweight and obesity is increasing and has tripled since 1975 (World Health Organisation, 2021). Weight gain is largely due to the high sedentary lifestyle of an individual (Agarwal et al., 2013) and it can be managed effectively through physical activities. Enhancing nutritional security by educating people to grow nutria-gardens is also an effective way to promote good health and keep health problems to a minimum

(Kumari et al., 2019). Singh (2019) concluded that food consumption pattern of village people improved when the nutrition gardens were created by them. Healthy food habits and regular exercise can benefit a person towards leading a healthy life. So lifestyle has a significant impact on health (El-Kader & Mohammad, 2013). This should not be taken on a lighter note because in the bigger picture, health and lifestyle are related with workplace productivity of an individual (Mitchel & Bates, 2011). A person who is physically and mentally healthy can contribute in increasing the productivity at the workplace. Farmers would not be able to play a productive role if their health is poor.

Lifestyle includes the everyday activities of an individual which includes daily food intake, exercise, sleep etc. A healthy lifestyle comprises of healthy habits. Getting proper sleep, having adequate nutrition, regular physical activities are some of the essential elements that help in sustaining a good health. Exercise can also uplift the condition of mental health, improve oxygen uptake and cardiorespiratory fitness (Demers, 2013). Along with exercise having proper meals is necessary. Healthy diet not only

improves physical health but also mental health (Minhas, 2013). Besides these factors, timely medical checkups and other personal health habits are contributory in keeping a person healthy. Considering these factors, the current research was conducted on the farming community in the rural areas from Punjab, India with objective to determine relationship of lifestyle of farming community. Indian economy is dependent upon agriculture and farming community as it contributes 18 per cent to the total GDP and employs 60 per cent of the rural population (Statista Research Department, 2020). Therefore the health of the farming community impacts the GDP of the country to a great extent.

METHODOLOGY

In the current study, the widely adaptable descriptive survey research design was used to collect information and analyze the effect of lifestyle on health status of farming families. The study was conducted in the Punjab state. Random sampling technique was used and a questionnaire was developed pertaining to the various parameters of lifestyle (dietary diversity score, meal frequency, nutrition, physical activity, stress management, personal health habits, availing medical advice, substance abuse) and health (mental health and physical health). The data was collected from 120 respondents (60 male and 60 female) from farming families. Lifestyle (LS) of the respondents was assessed in terms of eight parameters i.e. meal frequency (MF), dietary diversity score (DDS), physical activity (PA), nutrition intake (NI), stress management (SM), personal health habits (PHH), availing medical advice (AMA) and substance abuse (SA). DDS was calculated using 24 hour recall method from the respondents and scored according to the 12 food groups laid down by Swindale & Bilinsky (2006). MF, NI, PA, SM, PHH, AMA and SA were measured using a four point scale from 0 to 3 (never, sometimes, fairly often and always). All the seven assessing factors except substance abuse were directly related to good lifestyle while scoring for substance abuse being negatively related, was reversed.

For health status, both mental and physical health of the respondents was assessed. Mental health status (MHS) was assessed by total of 31 statements and was measured on a four point scale with the assigned scores of 0 to 3 (never, sometimes, fairly often and always). The physical health status (PHS) was assessed by combination of health related statements and presence of severe lifestyle related disorders. A total of 13 statements related to general health disorder were measured on four point Likert scale having scores 0 to 3. Three severe health disorders were measured on a dichotomous scale i.e. yes or no. Overall health status (OHS) was calculated by summing up MHS and PHS. Retrieved data were

analyzed using SPSS (Statistical Package for Social Sciences). For assessing the lifestyle and health of farming community, the average of the lifestyle and health parameters were calculated and were subjected to t test to find the difference between the male and the female respondents. The relationship between the lifestyle parameters and health parameters were calculated by Karl Pearson correlation coefficient and multivariate linear regression.

RESULTS AND DISCUSSION

Table 1 shows the overall DDS was 6.92 which depicts that respondents do not have much variety in their routine food items. Gender comparison for DDS shows that males ($\bar{x}=7.00$) had better dietary diversity than females ($\bar{x}=6.83$) but it was not statistically significant. Similarly no significant gender difference was observed for MF, PA, PHH and AMA while for rest of the parameters i.e. nutrition intake, stress management and substance abuse the gender difference was significant. The mean NI shows that males ($\bar{x}=2.04$) had more nutritional diet than females ($\bar{x}=1.92$) with a significant difference ($t=2.223$, $p<0.05$). For SM also, males ($\bar{x}=1.92$) had significantly ($t=3.219$, $p<0.01$) better score than females ($\bar{x}=1.66$). It shows that males manage their stress by participating in various social gatherings etc. Women is more inclined inside four walls of house, is not able to remove her stress. So overall males consume more nutritional diet and manage their stress better as compared to female counterparts. On the other hand, SA (substance abuse) among males ($\bar{x}=0.37$) was more than females ($\bar{x}=0.00$) with a significant difference ($t=6.012$, $p<0.01$). This is because males in Punjab consume more alcohol as compared to females.

Table 2 depicts the gender wise health profile of the farming families. PHS of males ($\bar{x}=2.77$) was higher than females ($\bar{x}=2.5$) which shows that males had better physical health than females and the difference was statistically significant ($t=3.867$, $p<0.01$). MHS of males ($\bar{x}=2.37$) was also significantly ($t=3.924$, $p<0.01$) more than females ($\bar{x}=1.97$). As physical and mental health of males was better than females, OHS for males ($\bar{x}=2.55$) was also reported to be higher than female ($\bar{x}=2.29$) and has shown significant difference ($t=4.341$, $p<0.01$). Thus, males were better than female respondents in terms of physical as well as mental health.

Table 2. Health status of farming community (n=120)

Health → Parameters ↓	$\bar{x}$ Male	$\bar{x}$ Female	t value	Overall mean
MHS	2.43	2.16	3.924**	2.30
PHS	2.77	2.54	3.867**	2.65
OHS	2.55	2.29	4.341**	2.42

**p<0.01

Table 1. Lifestyle Status of farming community (n=120)

Lifestyle → Parameters ↓	DDS	MF	NI	PA	SM	PHH	AMA	SA
Male	7	2.55	2.04	1.26	1.9	1.8	2.01	0.29
Female	6.83	2.53	1.92	1.13	1.68	1.89	2.05	0
t value	1.489	0.289	2.223*	1.449	3.219**	1.19	0.39	6.012**
Overall mean	6.92	2.54	1.98	1.19	1.79	1.85	2.03	0.15

*p<0.05, **p<0.01

Table 3. Relationship between lifestyle and health (n=120)

Lifestyle → Health ↓	DDS	MF	PA	NI	SM	PHH	AMA	SA	LS
MHS	0.073	.218*	0.134	.464**	.599**	0.124	.244**	-.233*	.540**
PHS	.231*	0.119	-0.031	.301**	.407**	0.012	-0.046	-0.165	.271**
OHS	0.133	.205*	0.091	.453**	.592**	0.098	0.17	-.233*	.501**

* p<0.05, ** p<0.01

Table 3 showcases the relationship of health with the lifestyle parameters of the respondents. DDS was significantly and positively correlated with physical health ($r = .231$, $p<0.05$). In the present study, DDS was found to be associated with physical health while previous literature shows it is also related with mental health (Minhas, 2013).

Further, MF of the respondents was significantly and positively correlated with MHS ($r = .218$, $p<0.05$) and OHS ($r = .205$, $p<0.05$). Overall health (OHS) and mental health (MHS) were found to be correlated with the meal frequency (MF) because timely and regular meals help to maintain proper metabolic conditions and nutrition levels.

It is further pertinent from the table that NI of the respondents was significantly and positively correlated with MHS ($r = .464$, $p<0.01$), PHS ($r = .301$, $p<0.01$) as well as OHS ($r = .453$, $p<0.01$). It is not surprising to see that nutrition intake was related to all the health parameters i.e., mental health (MHS), physical health (PHS) and overall health (OHS) as similar to meal frequency, consumption of nutritional foods helps in maintenance of health.

SM of the respondents was found to be significantly and positively correlated with both MHS ($r = .599$, $p<0.01$) and PHS ($r = .407$, $p<0.01$) and also OHS ($r = .592$, $p<0.01$). However, AMA was significantly and positively correlated only with MHS ($r = .244$, $p<0.01$). Data further revealed that SA of the respondents was significantly and negatively correlated with MHS ($r = -.233$, $p<0.05$) and OHS ($r = -.233$, $p<0.05$). Contrary to previous literatures physical activity showed no relation with any of the health parameters (Demers, 2013; Tennebo, 2013; Jadhav, 2017).

Overall, the two lifestyle parameters i.e. NI and SM were significantly associated with PHS, MHS and OHS. On the whole, LS was found to be significantly and positively correlated with both MHS ($r = .540$, $p<0.01$) and PHS ($r = .271$, $p<0.01$) and also OHS ($r = .501$, $p<0.01$). The present study further strengthens the literature that health is associated with lifestyle, a finding noted in India (Bhandari & Paswan, 2020; Singh & Mishra, 2012) and abroad (Jasiukaitiene et al., 2020; Menotti et al., 2015; Puddu & Menotti, 2015).

Table 4 depicts the regression coefficient of the lifestyle parameters in relation to health. Data shows that the adjusted coefficient of the multiple regression R^2 came out to be 0.437 indicating that 43.7 per cent of variation in OHS has been explained by the lifestyle parameters. Of the eight lifestyle parameters DDS, NI, SM and SA showed significant effect on OHS. Table depicts that DDS was positively significant ($p<0.05$) which means that with the increase in dietary diversity score by one per cent the resultant overall health of the individual increases by 4.069 per cent. NI was also positively significant ($p<0.01$) which means that with the increase in nutrition intake by one per cent the resultant overall health of the individual increases by 1.282 per cent.

Table 4. Multivariate regression analysis of lifestyle parameters with health (n=120)

Factors	Regression factor B	t value	Constant	Adjusted R^2
DDS	4.069*	2.159	51.236	0.437
MF	0.079	0.139		
PA	-0.118	-0.241		
NI	1.282**	3.320		
SM	2.197**	6.592		
PHH	-0.121	-0.298		
AMA	-0.725	-1.360		
SA	-3.156**	-2.383		

* p<0.05, **p<0.01

The regression factor of SM was 2.197 ($p<0.01$) which means that with the increase in stress management by one per cent the resultant overall health of the individual increases by 2.197 per cent. On the contrary, the regression coefficient of SA was negatively significant ($p<0.01$) which means that with the increase in substance abuse by one per cent the resultant OHS of the individual decreases by 3.156 per cent.

CONCLUSION

The present study revealed the fact that stress management is important for having a good mental health, physical health as well as overall health. The study adds to the existing literature of health and lifestyle by depicting that availing timely medical advice is correlated with mental health. The strong point that came up from the study is that lifestyle was related to health in the rural population i.e. farming community. It aligned with other previous literatures on other population group which states the importance of lifestyle and its various parameters in improving health. Lifestyle of the respondents had an effect on their mental health, physical health as well as overall health. The health of the farming community was found to be related to their lifestyle. So there is need to create awareness and knowledge about importance of lifestyle among farming community.

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