

Evaluation of Bio Medical Profile of School Teachers

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Abstract

Purpose: The purpose of the study was to evaluate the Biomedical Profile of School Teachers of Jabalpur District, (Madhya Pradesh) School Teachers.

Method: By using purposive sampling 300 teachers of high and senior secondary schools of Jabalpur district, (M.P.) were involved. After follow up through verbal persuasions 200 responses were received in total out of which 46 were of male and 164 were of female teachers. The data/responses collected through questionnaire were analyzed by using descriptive statistics where percentage was worked out for interpretation. The level of significance was set at 0.05.

Result and Discussion: The biomedical profile indicated that awareness of health related components such as blood pressure, resting heart rate, blood cholesterol, HDL cholesterol and body fat percentage were very low among male and female teachers working in schools. Results further indicate that majority of the teachers, both male and female had or have non communicable diseases like back pain, muscle pain, muscle weakness, bone injury, leg cramps etc. These problems may be result of inactivity. According to WHO (2000) it is estimated that physical inactivity is as important as risk factor for non communicable diseases as is tobacco use.

Conclusion: The result of the study shows that the School teacher's level of concern about their own health is very less. And teachers are suffering many non communicable diseases. Physical inactivities are the main causes of their problems.

Key words: Bio medical Profile, Body Fat Percentage, Blood pressure, Resting heart rate, Blood cholesterol, & HDL cholesterol, Non Communicable Diseases.

Introduction:

Health is not a static phenomenon; it fluctuates within a range varying from optimum function to various levels of dysfunction (Dugdill L., 1995). It is a multi dimensional phenomenon such as physical, mental, social and each is influenced by numerous factors, medical and non-medical. In addition to these factors, the health of the workers is also influenced by the conditions prevailing at their work place. Health is concerned with the safeguard and welfare of people in various professions. Health is very important for the development of one's own self, society and the nation at large.

Physical health and fitness is a positive quality that is related to the prevention and most of disease. Physical fitness places an emphasis on having vigour and energy to perform physical work and exercise. Beside this regular appropriate physical activity can bring economic benefits in terms reduced health care cost, increased productivity, healthier physical and social environments, better performance in offices and work sites, stronger participation in sports, recreation and greater sports achievements.

According to W.H.O. (2000) reports the cost of medical care is drastically growing due to physical inactivity throughout the world. Increasingly sedentary life combined with the growing use of passive technological practices in daily life is causing higher levels of physical inactivity among persons of all ages, both in developed and developing countries. Despite the recognized available evidence of the benefits of physical activity to health, to economy and to society it is estimated that more than 60% of the world population is inactive or insufficiently active to gain health benefits. In general, the level of inactivity is higher among women.

Schools are ideal settings for enabling students and teachers to develop life-long healthy behaviours to achieve their individual potential and contribute to a healthy society. School physical education classes can assist young people to "Move for Health" by providing them with opportunities and time to safely access physical activity facilities in an environment that is supported by teachers, parents and friends.

Teachers are the role model for not only their students but also for the society. Their physical activity profile represents their health status and their awareness towards health. And it will definitely effect to their students and society. That's why research scholar conducted this study to evaluate the teacher's Bio medical profile.

Material and Methods

By using purposive sampling 300 teachers of High and Senior Secondary Schools of Jabalpur district, (M.P.) were involved for obtaining responses questionnaire. After follow up through verbal persuasions 200 responses were received in total out of which 46 were of male and 164 were of female teachers.

The data/responses collected through questionnaire were analyzed by using descriptive statistics where percentage was worked out for interpretation. The level of significance was set at 0.05.

Results and Discussion

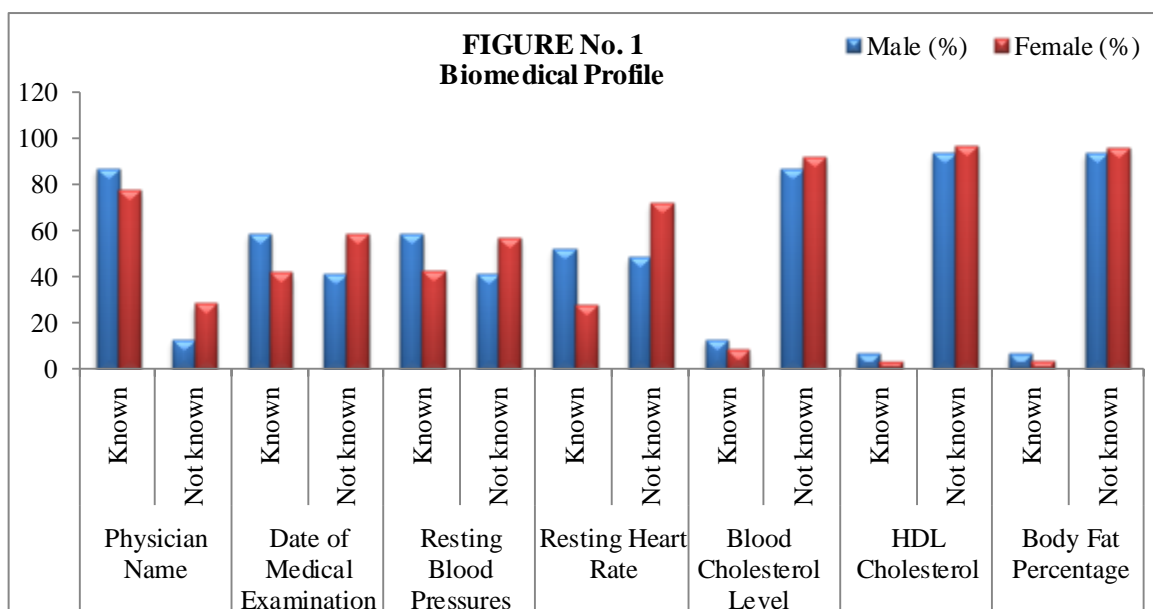
Bio-Medical Profile

The data on biomedical profiles of school teachers which includes biomedical parameters such as blood pressure, heart attack, cholesterol, body fat, have been shown in table –1.

TABLE -1
Bio Medical Profile

Variables / Information	Response	Male (%)	Female (%)
Physician Name	Known	86.95	77.39
	Not known	13.04	28.08
Date Of Medical Examination	Known	58.69	41.55
	Not known	41.30	58.44
Resting Blood Pressures	Known	58.69	42.85
	Not known	41.30	57.14
Resting Heart Rate	Known	52.17	27.92
	Not known	48.30	72.07
Blood Cholesterol Level	Known	13.04	8.44
	Not known	86.95	91.55
HDL Cholesterol	Known	6.52	3.24
	Not known	93.47	96.75
Body Fat Percentage	Known	6.52	3.89
	Not known	93.47	96.10

This table indicated that 13.04% male teachers and 28.08% female teachers did not know their physicians name. Table further indicated that only 58.69% male teachers and 41.55% female teachers reported their date of last complete medical examination. It may also be observed from this table that 41.30% male teachers and 57.14% female teachers were not sure regarding their resting blood pressures. Similarly 48.30% male teachers and 72.07% female teachers were not aware about their resting heart rate. On the variable blood cholesterol 91.55% female teachers and 86.95% male teachers were not aware of their blood cholesterol level, only 6.52% male teachers and 3.24% female teachers were aware about their HDL cholesterol and 93.47% male teachers and 96.10% female teachers were unaware about their body fat percentage.

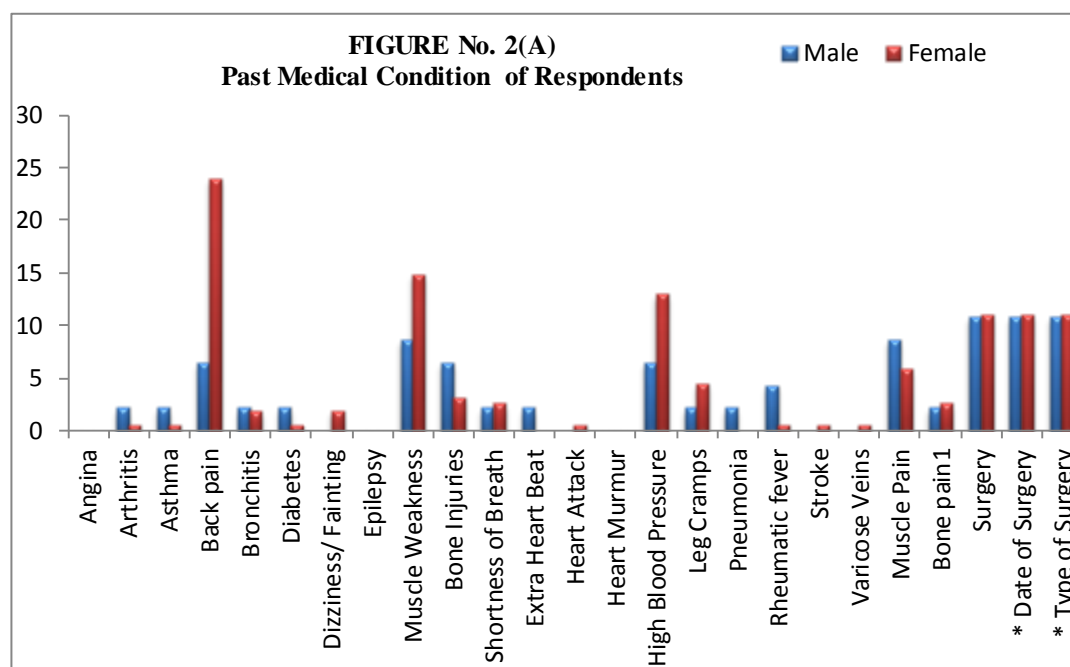


The past and present medical condition respective of various diseases of the respondents have been given in table– 2.

TABLE - 2
Medical Condition (Past and Present) of Respondents

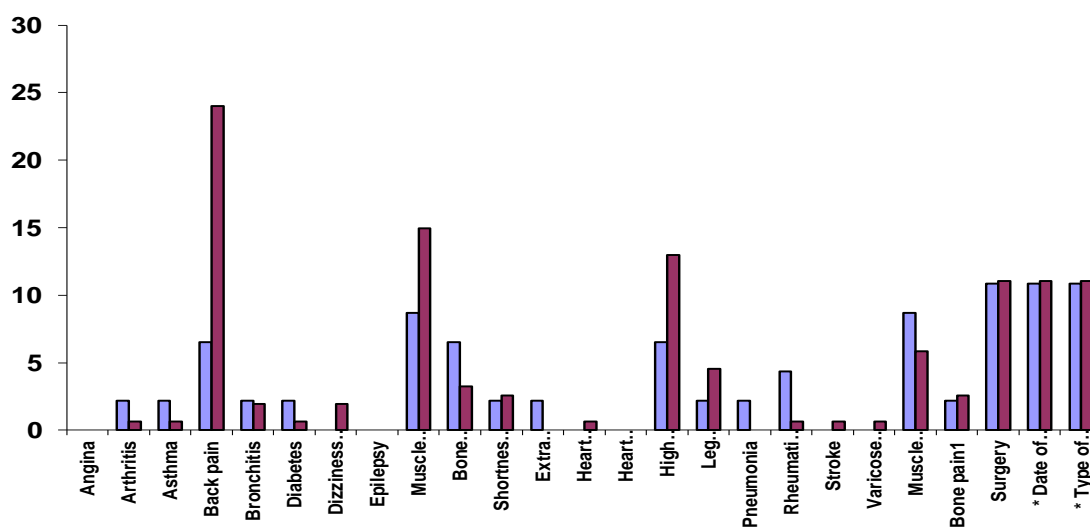
Medical Condition Diseases	Past (%)		Present (%)	
	Male	Female	Male	Female
Angina	Nil	Nil	Nil	Nil
Arthritis	2.17	0.64	2.17	2.59
Asthma	2.17	0.64	2.17	1.29
Back Pain	6.52	24.02	13.04	26.62
Bronchitis	2.17	1.94	2.17	1.29
Diabetes	2.17	0.64	2.17	0.64
Dizziness/ Fainting	Nil	1.94	Nil	1.29
Epilepsy	Nil	Nil	Nil	Nil
Muscle Weakness	8.69	14.93	2.17	17.53
Bone Injuries	6.52	3.24	4.34	1.29
Shortness Of Breath	2.17	2.59	4.34	3.89
Extra Heart Beat	2.17	Nil	6.25	1.94
Heart Attack	Nil	0.64	Nil	Nil
Heart Murmur	Nil	Nil	Nil	Nil
High Blood Pressure	6.52	12.98	10.86	8.44
Leg Cramps	2.17	4.54	Nil	3.89
Pneumonia	2.17	Nil	Nil	Nil
Rheumatic Fever	4.34	0.64	2.17	0.64
Stroke	Nil	0.64	Nil	Nil
Varicose Veins	Nil	0.64	Nil	1.93
Muscle Pain	8.69	5.84	8.69	17.53
Bone Pain	2.17	2.59	6.52	7.14
Surgery	10.86	11.03	2.17	1.29
* Date Of Surgery	10.86	11.03	2.17	1.29
* Type Of Surgery	10.86	11.03	2.17	0.64

The table – 2 revealed that 6.52% male teachers taken for this study had various medical problems such as back pain, bone injuries, high blood pressure. Muscle weakness and muscle pain each 8.69%, rheumatic fever 4.34% , bone pain, phenomena, leg cramp, extra heart beat , shortness of breath, diabetes, bronchitis , asthma, arthritis (2.17% each) . whereas 164 female teachers surveyed in the studied have reported that they had different medical problems such as back pain 12.98% surgery , date of surgery , type of surgery (11.03% each) arthritis , asthma diabetes , heart attack , rheumatic fever , stroke , various veins (0.64% each).



In the present status of Jabalpur school teachers both male and female on their medical condition showed 26.62% female have back pain, muscle weakness 17.53% , high blood pressure 8.44%, shortness of breath , leg cramp (3.89% each).Asthma, bronchitis, dizziness / fainting, bone injuries, surgery, date of surgery (1.29% each). Diabetes, rheumatic fever, type of surgery (0.64% each). Arthritis 2.59%, bone pain 7.14%. Whereas male teachers presently have back pain 13.04% extra heart beat 6.52%, high blood pressures 10.86%, muscle pain 8.69%, bone pain 6.52%, arthritis, asthma, bronchitis, diabetes, muscle weakness, rheumatic fever, surgery, date of surgery, type of surgery (2.17% each).

FIGURE No. 2(B)
Present Medical Condition of Respondent

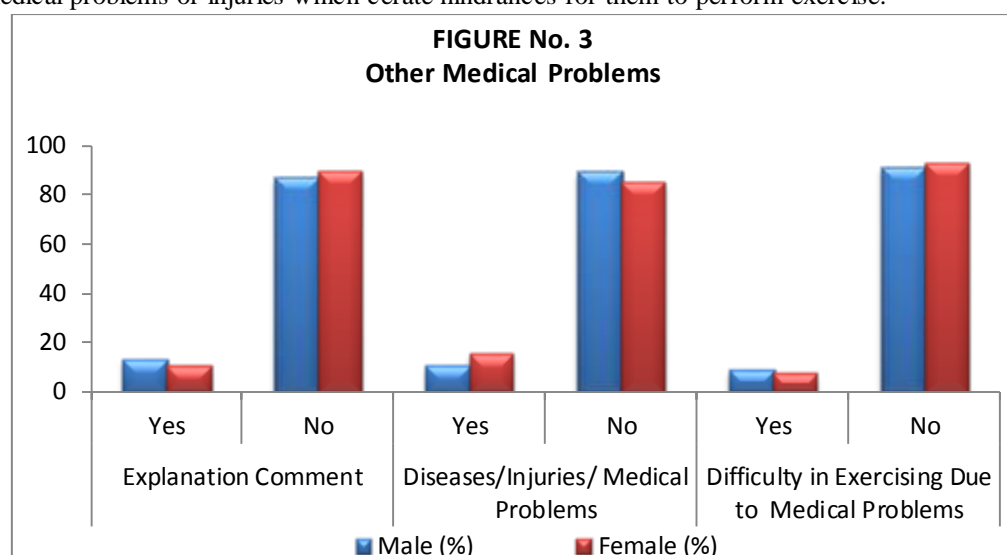


Medical problems have been given in table –3 in which they faced difficulty in exercising due to medical inability.

Table –3
Other Medical Problems

Medical Conditions	Response	Male (%)	Female (%)
Explanation Comment	Yes	13.04	10.38
	No	86.95	89.61
Diseases/ Injuries/ Medical Problems	Yes	10.86	14.93
	No	89.13	85.06
Difficulty In Exercising Due To Medical Problems	Yes	8.69	7.14
	No	91.30	92.85

Table –3 indicate that 10.86% male teachers and 14.93% female teachers has also reported diseases / injuries / medical problems. Out of the total sample / subjects only 13.04% male teachers and 10.38% female teachers gave their comments with any inhibition only 8.69% male teachers and 7.14% female teachers reported some medical problems or injuries which create hindrances for them to perform exercise.



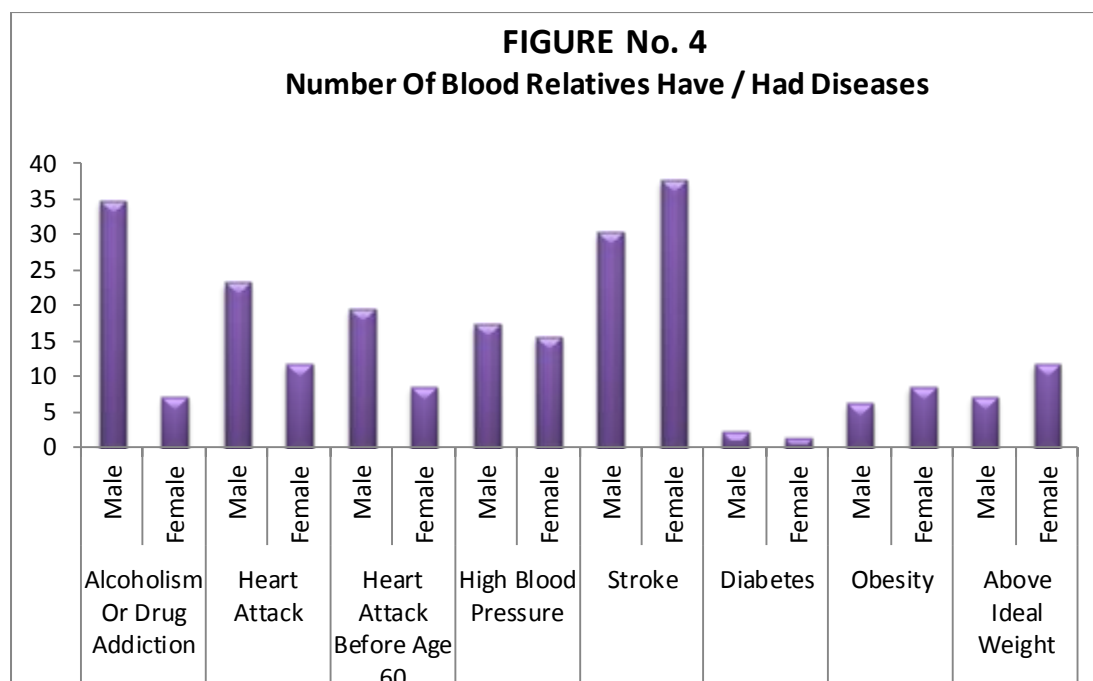
Number of blood relatives (Mother, Father, Siblings) of teachers who have /had the various diseases has been shown in table-4.

Table- 4
Number of Blood Relatives Have / Had Disease

Disease	Subject	% of Respondents Having Sick Relatives
Alcoholism Or Drug Addiction	Male	34.78
	Female	7.14
Heart Attack	Male	23.19
	Female	11.68
Heart Attack Before Age 60	Male	19.56
	Female	8.44
High Blood Pressure	Male	17.39
	Female	15.58
Stroke	Male	30.43
	Female	37.66
Diabetes	Male	2.17
	Female	1.29
Obesity	Male	6.25
	Female	8.44
Above Ideal Weight	Male	7.14
	Female	11.68

The above table indicates that 34.78% male teachers and 7.14% female teachers have alcoholic or drug addict relatives. Teachers also have relatives who had heart attack 23.19% male and 11.68% female teachers. 19.56% male teachers and 8.44% female teachers reported have relatives who had heart attack before 60 years of age. 17.39% relatives of male teachers and 15.58% of female teachers reported high blood pressure. 30.43% and 37.66% relatives of male and female teachers have /had stroke. Further, 2.17% of male teacher's relatives and 1.29% of female teacher's relatives have diabetes. 6.25% relatives of male and 8.44% relatives of female here reported to be obese.

Further the table shows 7.14% and 11.68% relatives of male and female teachers were found above the level of ideal weight.



Conclusion :

The results of the study shows that biomedical profile indicated that awareness of health related components such as blood pressure, resting heart rate, blood cholesterol , HDL cholesterol and body fat percentage were very low among male and female teachers working in schools. This depicts their level of concern about their own health. Results further indicate that majority of the teachers, both male and female had or have non communicable diseases like back pain, muscle pain, muscle weakness , bone injury, leg cramps etc. These problems may be result of inactivity According to WHO (2000) it is estimated that physical inactivity is as important as risk factor for non communicable diseases as is tobacco use.

Recommendation: it is recommended that -

1. The scope of the present study should be extended to the national level school teachers belonging to different demographics.
2. Socio - economic, socio-cultural and other similar factors should be controlled as far as possible.
3. Longitudinal studies should be undertaken for more authentic results.
4. Similar studies should be conducted on general population.

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