



PHYSICAL FITNESS AND BMI OF SELECTED HOMEMAKERS.

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ABSTRACT

Good BMI is only possible if you have a healthy Physical fitness. Physical fitness can be achieved by having activities such as exercise and performing house hold activities, regular walking etc. . Physical and mental fitness play very important roles in your lives and people who are both, physically and mentally fit are less prone to medical conditions as well. Random sampling procedure was adopted for selection of 40 samples in Jalna. The results indicate that BMI of the selected sample ranged from 10 to 40. Majority of home makers were having good health status viz. performing all the activities very easily. Suggestion to change eating habits, Regular exercise habit to achieve better physical fitness and reduced BMI.

KEYWORDS : BMI, Physical Fitness, Vo₂ max.

Introduction:

BMI (Body Mass Index) is important as it is widely regarded that the chances of having a longer and healthier life are improved if a healthy BMI is maintained. If the BMI is high, then it also has an increased risk of developing type 2 diabetes, as well as other metabolic diseases such as hypertension, high cholesterol and heart disease.

The World Health Organisation (WHO) lists a high BMI as a major risk factor for heart disease, stroke, bone and joint problems including osteoarthritis and a number of cancers, including breast, colon and endometrial cancer.

Large scale surveys, such as SHIELD (Study to Help Improve Early evaluation and management of risk factors Leading to Diabetes), conducted in the USA in 2004, show clear associations between a raised BMI and increased risks of hypertension (high blood pressure) and dyslipidaemia (high cholesterol) in addition to type 2 diabetes. Good BMI is only possible if you have a healthy Physical fitness. Physical fitness can be achieved by having activities such as exercise and performing house hold activities, regular walking etc.

People who are physically fit are also healthier, are able to maintain their most optimum weight, and are also not prone to cardiac and other health problems. In order to maintain a relaxed state of mind, a person should be physically active. A person who is fit both physically and mentally is strong enough to face the ups and downs of life, and is not affected by drastic changes if they take place.

What is Fitness?

A person who is fit is capable of living life to its fullest extent. Physical and mental fitness play very important roles in your lives and people who are both, physically and mentally fit are less prone to medical conditions as well.

Fitness does not only refer to being physically fit, but also refers to a person's mental state as well. If a person is physically fit, but mentally unwell or troubled, he or she will not be able to function optimally. Mental fitness can only be achieved if your body is functioning well. You can help relax your own mind and eliminate stresses by exercising regularly and eating right.

Relationship of physical fitness and VO₂ Max:

The Physiological fitness or Cardio Respiratory Fitness is determined from the Maximum aerobic power (VO₂Max) of an individual. In order to ensure health and safety of people at work, demand and fitness should match. It is known that every individual has certain potential work capacity known as aerobic work capacity (VO₂Max), a fraction of which is utilized while performing a given task.

BMI, Physical fitness and VO₂Max are therefore important as a

triangle. To decrease BMI one should perform Regular aerobic exercise, maintain balanced diet to keep healthy body. The present study was aimed with the objective to know physical fitness, BMI and VO₂Max of selected homemakers.

Methodology:

Random sampling procedure was adopted for selection of 40 samples in Jalna. Measuring tape was used for measuring selected home makers. weighing machine was used for measuring weight. Garrow's scale (1987) was used for BMI. Classification of Physical fitness VO₂Max ml/min was done as per the Saha 1996

Result and Discussion:

Table No. 1. Physical characteristics of the respondents according to age groups.

Sr.No	Age	Number of respondents	Mean age(year)	Mean Weight(Kg)	Mean Height(cm)	Mean BMI
1.	21-30	12(30)	25	53.33	152.08	23.08
2.	31-40	16(40)	35.5	54.25	152.75	23.48
3.	41-50	12(30)	45.5	55.41	151.92	24.30

From Table.no.1 . It shows that 40 Per cent respondents belong to the age group of 31-40 years. The highest mean height 152.75 cms was found in the age group of 31-40 years followed by 152.08 cms and 151.92 cms from the age group of 21-30 and 41-50 years respectively. The highest mean body weight was 55.41 kgs belong to the age group of 41-50 years which was followed by the respondents with mean body weight 54.25 kgs and 53.33 kgs from the age group of 31-40 years and 21-30 years respectively. It was observed from the data that with increase in age there was increase in body weight and BMI of the home makers.

Table.No.2. Physical Fitness of selected Homemakers:

Sr.No	Interpretation of Score	Score kg/m ²	Frequency N=40
1.	Under weight	<18.5	4(10)
2.	Normal	18.5 to 22.9	11(27.5)
3.	Over weight	23.0 to 24.9	9(22.5)
4.	Obese	25.0 and more	16(40)

(Figure in parenthesis indicate percentage)

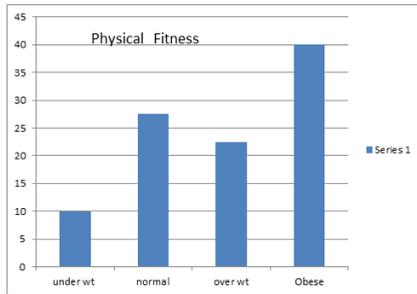
Physical Fitness of selected Homemakers:

Based on weight and height of the home makers, BMI of the selected homemakers was calculated using formula to assess the physical fitness of the respondents. The results indicate that BMI of the selected sample ranged from 10 to 40. On the basis of BMI subjects were classified for the physical fitness are indicated in Table.no.2

It is clear from the table .no.2. Majority of the respondents 16(40) had obese in the range of (25 or more) while 11(27.5) had normal physical fitness. 9(22.5) of the homemakers were suffering from over

weight (23-24.9). 4(10%) respondents were found to be under weight (<18.5).

Phool kumari and Rekha Dayal (2008) reported in which the respondents were categorised by Warrow's scale (1987) and found that Maximum 57.5 % respondents belonged to the category of 18.5 to 25.01 having normal weight. 2.5 % of respondents belonged to the category of grade III (Severe) i.e under weight and grade II obese.



A review of over 12,000 people in the United States, published in 2014, showed that people with a BMI of 25-29.9 had a 50% increased risk of diabetes compared to people with a BMI of 18.5-24.9.

Obesity was linked with increased rates of diabetes between 2.5 and 5 times higher than people of normal weight, with the highest risk being those with a BMI of 40 or more. The results found:

- BMI 25-29.9 (overweight): 50% higher type 2 diabetes risk
- BMI 30-34.9 (obesity class I): 2.5 times more likely to get diabetes
- BMI 35-39.9 (obesity class II): 3.6 times more likely to get diabetes
- BMI 40+ (obesity class III): 5.1 times more likely to develop diabetes

Table.No.3. VO₂ –Max: Physiological Cost.

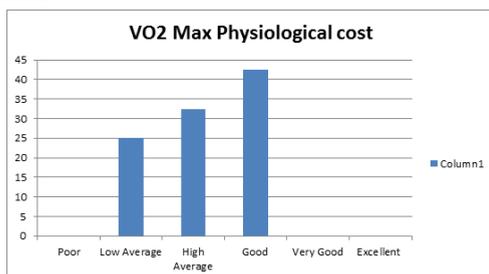
Sr.No	Health status	VO ₂ -Max range	Frequency(N=40) (ml/min)
1.	Poor	Up to 15	Nil
2.	Low average	16-25	10 (25.00)
3.	High Average	26-30	13 (32.50)
4.	Good	31-40	17 (42.5)
5.	Very Good	41-45	Nil
6.	Excellent	more than 46	Nil

(Figure in parenthesis indicate percentage)

VO₂ –Max: Physiological Cost.

The Physical fitness has been classified on the basis of VO₂-Max ml /min. It is clear from the table no.3. that, the majority of respondents 42.5% had good physical fitness followed by 32.5 % of respondents in High average health status. Rest of 25.00% respondents were having low average health status. The graphical presentation was presented in Fig.No.2. Majority of home makers were having good health status viz. performing all the activities very easily.

Murali and Kulkarni reported on the basis of Vo₂-Max (ml/min) as the selected women were having good (61%), very good (33%) physical fitness and concluded that women can perform any type of work within the endurance limit without getting tired and exhausted.



Conclusion:

It can be concluded from the data that with increase in age there was increase in body weight and BMI of the home makers. Majority of the respondents 16(40) had obese in the range of (25 or more) while 11(27.5) had normal physical fitness. Majority of home makers were having good health status viz. performing all the activities very easily.

It can be also suggested that if you have a BMI over 30, you may be referred to join a weight loss group or given exercise on prescription, Suggestion to change eating habits, Regular exercise habit to achieve better physical fitness and reduced BMI.

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