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# **Original Research Article**

# Life style characteristics of hospital paramedical healthcare professionals: a study from a tertiary care hospital, Pondicherry

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#### **ABSTRACT**

**Background:** Life style is linked with future cardiovascular diseases. The aim of the work was to study the life style characteristics of hospital paramedical healthcare professionals.

**Methods:** Paramedical professionals working in Aaruapadai veedu medical college and hospital were taken up for the study. The study was done as a cross sectional study using a pretested questionnaire method. Age, height, weight, waist circumference, diet pattern, physical activity, sleep and yoga pattern in all the hospital paramedical professionals were collected and studied.

**Results:** Of the total one hundred hospital paramedical professionals, there were 90 female paramedical professionals. Among the female paramedical professionals, there were 69 of age less than 30 years. Normal body mass index of less than 25 was seen (56) 62% of female paramedical professionals. Nine paramedical professionals had abdominal obesity. Of the total 10 male paramedical professionals 6 (60%) were taking food at improper time. Seven male and 58 female paramedical professionals did not do any form of exercise. A total of 84 female paramedical professionals were taking carbohydrate rich diet. Nineteen female paramedical professionals were doing regular exercise and three paramedical professionals were doing yoga. Eighty-five female paramedical professionals had refreshing normal sleep.

**Conclusions:** Hospital paramedical healthcare professionals had a poor physical activity and diet pattern. The prevalence of abdominal obesity was less in paramedical professionals.

Keywords: Body mass index, Diet, Life style, Physical activity, Sleep

#### INTRODUCTION

Poor life style like that of physical inactivity, poor diet pattern is related to life style diseases like obesity, cardiovascular diseases, diabetes. Life style diseases have become more prevalent in the developing countries like India. Cardiovascular diseases are the leading cause of mortality worldwide. Lack of physical activity and improper diet causes overweight and obesity which in turn lead on to diabetes, hypertension, dyslipidemia and cardiovascular diseases. Yoga and good sleep

habits have a positive influence on risk factors of cardivascular diseases. 7-11 We in this study have analysed the life style of hospital healthcare paramedical professionals.

#### **METHODS**

The study was done as a cross sectional study using a pretested standardized questionnaire method during the period of April to November 2016 in Aaruapadai veedu medical college hospital. The study was conducted after

obtaining a proper institutional ethics committee approval. Paramedical professionals working in various departments of both gender and all ages were taken up for the study. Those who are willing to participate in the study were included after obtaining an informed consent. Those who are not willing to give informed consent were excluded from the study. Pregnant females were also excluded. All the participants were asked to fill in a pretested questionnaire, which contained questions regarding their pattern of diet, sleep, yoga habits and physical activity in the form of exercise like walking, jogging, swimming. A standardized wall mounted scale was used in measuring the height making the participant stand erect in a flat surface after removing the foot wear and the weight was recorded using a standardized weight scale after removing the foot wear and heavy clothing's if any. Abdominal circumference was measured using a standard inch tape at the level midway between lowest rib and iliac crest. Age, sex, height, weight, diet pattern, exercise pattern, sleep and yoga pattern in all the participants were studied.

#### **RESULTS**

Of the total one hundred hospital paramedical professionals, there were 10 male paramedical professionals and 90 female paramedical professionals (Table 1).

Table 1: Sex distribution.

Sex	Paramedical professionals
Male	10
Female	90

Among the female paramedical professionals, there were 69 of age less than 30 years (Table 2).

**Table 2: Age distribution.** 

Age	Female paramedical professionals. N=90	Male paramedical professionals. N=10
<30	69	10
31-40	15	0
41-50	4	0
51-60	2	0
>60	0	0

Normal body mass index of less than 25 was seen (5) 50% of male paramedical professionals and (56) 62% of female paramedical professionals (Table 3). Nine paramedical professionals,8 female and one male had abdominal obesity (Table 4). Of the total 90 male paramedical professionals 45 (50%) were taking food at proper timing and the remaining 45 (50%) missed their timing (Table 5). A total of 84 female and nine male paramedical professionals were taking carbohydrate rich diet (Table 5). Nineteen female paramedical professionals were doing regular exercise and three paramedical professionals were doing yoga (Table 6). Eighty-five

female and five male paramedical professionals had normal refreshing sleep (Table 7).

Table 3: Body mass distribution.

BMI	Female paramedical professionals. N=90	Male paramedical professionals.N=10
<25	56	5
25-29.9	32	5
30-34.9	2	0
35-39.9	0	0
≥40	0	0

Table 4: Abdominal circumference.

Age	Female paramedical professionals > 80cms. N=90	Male paramedical professionals >90cms. N=10
<30	03	1
31-40	04	0
41-50	01	0
51-60	0	0
Total	08	1

**Table 5: Diet distribution.** 

Diet	Female paramedical professionals.N=90	Male paramedical prof. N=10
Proper time	45	4
Improper time	45	6
High carbohyrate	84	9
Low carbohyrate	6	1
Junk foods	8	2
Nonjunk foods	82	8

Table 6: Physical activity distribution.

Activity	Female paramedical professionals. N=90	Male paramedical professionals. N=10
Exercise< 4 days/week	13	2
5 or more days	19	1
No exercise	58	7
Practicing yoga	3	0
Not practicing yoga	87	10

#### **DISCUSSION**

Cardiovascular diseases are linked with poor life style and the changing life style pattern due to urbanization in developing countries like India has lead to increased prevalence of these life style diseases. Paramedical professionals play an important role in advising the patients towards maintaining a healthy life style. In turn they themselves have to maintain a good life style. In our study, female paramedical professionals (90%) outnumbered the male paramedical professionals. Most

of the paramedical professionals (79%) were less than 30years of age and none of the paramedical professionals in our study were more than 60years of age. Obesity as measured from body mass index is both directly and indirectly associated with cardiovascular diseases.<sup>3,4</sup> A total of 32 (35.5%) female paramedical professionals and 5 (50%) of male paramedical professionals were overweight having body mass index in the range of 25-

29.9.<sup>3</sup> Paramedical professionals had a lesser prevalence of overweight when compared to health care physicians.<sup>3</sup> Only two (2%) of the paramedical professionals were obese in our study. Abdominal obesity described as waist circumference more than 90cms in male and 80cms in females, which is considered more significant than general obesity was seen in nine paramedical professionals, of which eight were females.<sup>3,4</sup>

Table 7: Sleep pattern.

Sleep	Female paramedical professionals. N=90	Male paramedical professionals. N=10
Going to bed before 10pm getting up before 6 am	9	1
Going to bed before 10pm getting up after 6 am	43	2
Going to bed after 11pm getting up before 6 am	38	7
Disturbed sleep	5	0
Normal sleep	85	10

In the present study 50% of the female paramedical professionals were taking food at improper time schedule and 93% of female paramedical professionals were taking high carbohydrate diet. This type of diet pattern predisposes to cardiovascular diseases in the future.<sup>3-7</sup> Physical activity and physical fitness have been proved to have a positive impact on the cardiovascular fitness of a individual.<sup>7</sup> But 65% of the female paramedical professionals and 70% of the male paramedical professionals did not do any form of exercise in any day of the week, which predisposes these paramedical professionals to future cardiovascular disease. Yoga, sleep and meditation has been proved in previous studies in both primary as well as secondary prevention of cardiovascular illnesses and also in modifying the cardiovascular disease risk factors.8-12 All the male paramedical professionals and 97% of the female paramedical professionals did not have the practice of performing yoga. The sleep duration and timing of retiring to bed was poor in 45% of paramedical professionals making themselves at risk for future cardiovascular illnesses but the number of paramedical professionals having poor timing and duration of sleep was less when compared to health care physicians (57%).3 Though they had less duration of sleep, 95% of paramedical professionals reported a normal refreshing sleep possibly because of younger age group of paramedical professionals in our study. When compared to our previous study on health care physicians, the present study done on paramedical professionals showed that the paramedical professionals have better body mass index, abdominal circumference and sleep habits but a poorer diet and physical activity pattern. These paramedical professionals have to make necessary effort to alter their life style, so as to prevent future cardiovascular diseases.

#### CONCLUSION

Hospital paramedical healthcare professionals had a poor physical activity and diet pattern. They did not have the habit of doing yoga. The prevalence of obesity and abdominal obesity was less in paramedical professionals.

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Institutional Ethics Committee

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