



Research Article

THE EFFECT OF INTER PROFESSIONAL APPROACH IN MANAGEMENT OF OBESITY: AN OBSERVATIONAL STUDY

Kamath Madhusudhana *

Division of Ayurveda, Centre for Integrative Medicine and Research (CIMR), Manipal Academy of Higher Education, Manipal, Karnataka, India

*Corresponding Author Email: drbmnk@gmail.com

Article Received on: 15/04/20 Approved for publication: 12/05/20

DOI: 10.7897/2230-8407.110555

ABSTRACT

Lack of physical activity, frequent intake of food, industrialization, stress during the work, various types of junk food e.g. fast food, bakery items, increased amount of the soft drink result in Obesity. There are some new researches, some new efforts and some new paradigm in the path of the solution of the disease. The objective is to evaluate the role Inter professional Approach in the management of Obesity. Non Randomised, Prospective, Comparative, Clinical study, where a total of 24 patients was selected from OPD Division of Ayurveda, CIMR. Change in BMI was significant at the level of $p < 0.01$ in both the groups. While abdominal, hip and waist measurements were significant at the level of $p < 0.05$ in inter professional practice. The present experiment was planned to study patients willingness and desire to take Diet and then decide suitable, cooperative, and the willing patient goes for Yoga, diet, and counselling treatment as part of the inter professional study. Taking into considering all these data here an effort has been made to evaluate the role of diet and inter professional management in Obesity.

Keywords: Obesity, Weight gain, Ayurveda, Diet, Inter professional practice.

INTRODUCTION

Obesity is a disease condition that highly prevalent in both developed and developing countries. Obesity accounts for 60% of cases of Diabetes, 40% of cases of hypertension and 20% of cases of heart disease and stroke¹. A recent WHO report on the worldwide burden of disease indicates that more than 1.9 billion adults, 18 years and older, were overweight. Of these, over 600 million were obese². India is gaining weight. Traditionally known for malnutrition, Indians now report more and more frequently with overweight, obesity and their consequences. Indians exhibit unique features of obesity: Excess body fat, abdominal adiposity, increased subcutaneous and intra-abdominal fat and deposition of fat in ectopic sites³. And the prevalence of central obesity was found to be high in coastal Karnataka⁴.

Conventional medications include Hypolipidemic drugs, Liposuction, etc. Complementary and alternative medicine treatments such as Ayurveda and yoga in association with Diet and nutritional discipline can also reduce body weight in the Obese.

Aims and objectives (hypotheses if applicable)

To evaluate the role Inter professional Approach in the management of Obesity

Study design: Non-Randomised, Prospective, Comparative, Clinical study

Study period: 2 years.

Sample size: 24 Subjects

MATERIALS AND METHODS

Exclusion criteria

- Patients with any systemic illness, and a pregnant woman.
- Patients who failed to give consent.

Inclusion criteria

- Clinically and diagnosed patients of Simple Obesity.
- Patients of either sex,
- Patients who agreed to sign the informed consent form.

Ethical clearance: Ref: IEC/452 /2015

Outcome measures: Sample Generation

Participants meeting the inclusion/exclusion criteria, which included demographic, health status and specific Obesity status 5-8

Methodology

A non-randomised, prospective, comparative, observational, clinical study, where a total of 24 patients was selected from OPD Division of Ayurveda, CIMR and distributed equally into two groups, after fulfilment of inclusion criteria. In Group I Dietary regimen and in Group II inter professional approach with different disciplines like Ayurveda, Yoga and Dietetics counselling were given. Data were collected at baseline, 21 and 60 days of the study. Objective data collected by BMI, anthropometric and skin fold thickness measurements.

RESULT

Parameters	Groups	Mean \pm SEM	t value	p-value
Weight	Group I	2.33 \pm 0.18	0.0	1
	Group II	2.33 \pm 0.31		
BMI	Group I	0.9 \pm 0.07	0.03	0.97
	Group II	0.9 \pm 0.15		
Abdomen	Group I	1.91 \pm 0.3	0.68	0.50
	Group II	2.33 \pm 0.5		
Hip	Group I	1.6 \pm 0.2	1.03	0.31
	Group II	2.1 \pm 0.3		
Waist	Group I	1.5 \pm 0.4	0.25	0.79
	Group II	1.7 \pm 0.4		
W/H	Group I	0.01 \pm 0.005	0.251	0.804
	Group II	0.01 \pm 0.003		
Waist	Group I	1.5 \pm 0.4	0.25	0.79
	Group II	1.7 \pm 0.4		
Biceps	Group I	0.09 \pm 0.02	0.685	0.50
	Group II	0.06 \pm 0.02		
Triceps	Group I	0.05 \pm 0.02	0.959	0.34
	Group II	0.10 \pm 0.03		
Supra scapular	Group I	0.06 \pm 0.02	0.670	0.51
	Group II	0.10 \pm 0.04		

Change in BMI was significant at the level of $p < 0.01$ in both groups. While abdominal, hip and waist measurements were significant at the level of $p < 0.05$ in inter professional practice.

DISCUSSION

The present experiment was planned to study patients willingness and desire to take Diet and then decide suitable, cooperative and the willing patient goes for Yoga, diet and counselling treatment as part of the inter professional study. Patients counselling was done regarding the benefits of the regimen to be followed. As the study involved several inter professional working together, the whole schedule was monitored closely to understand the successes of the model. Practically patient's opinion treated with Diet, doing yoga every day was very difficult. The whole experiment accomplishment depends on, how subjects of the study will follow the instructions given even after the completion of the study period. The study also revealed several constraints, where the patients were having difficulty in continuing the same regimen due to lack of will and affection to the sedentary lifestyle. The experiments of this kind should be repeated or followed up with it becomes a part of their daily routine.

Outcomes

In the present study, the change in BMI was significant at the level of $p < 0.01$ in both groups. While abdominal, hip and waist measurements were significant at the level of $p < 0.05$ in inter professional practice.

The expected outcome of the study

Short-term outcome (2-3 years)

- Increase in awareness about obesity and its risk factor.
- Educational and behavioural change in patients.

Intermediate outcome (3-5 years)

- Maintenance and practice dietary regulation. Thus maintain a stable BMI.
- Control of Obesity and prevention of obesity-associated risk factors.

Long term outcome (Above 5 years)

Establishment of the centre of excellence of the inter professional approach in Management of obesity.

CONCLUSION

The statistical analysis showed that the differences between the mean values of the individual parameter of both the groups were statistically not significant. Improvements in parameters like BMI, Anthropometric measurements were fair enough due to inter professional practice. However, study with a larger sample size may be required to establish the efficacy of inter professional practice in controlling Obesity.

Limitations

- Limitation of the study is long-term follow-up is difficult.
- Some percentage of a patient finds difficulty to follow the dietic activities.

Reflections

The study reflects that proper diet and strong determination to reduce the weight of the patient is required.

Implications

Further studies with a large number of subjects with additional methodology or intervention may yield a better outcome. Parameters used in the study were limited to external findings but the study can be extended by involving biochemical changes occurring due to the management model. As the obesity is a predisposing factor for many lifestyle disorders, a study or a treatment regimen with medications, lifestyle alteration and exercise involving various healthcare professionals may be very beneficial in curbing the prevalence of Obesity and may help in improving the quality of life.

ACKNOWLEDGEMENT

At the outset, I would like to thank MUFILPE Team. I am grateful to Dr Ciraj for allowing me to do my FAIMER Fellowship studies in this prestigious institution. I extend my sincere gratitude to my revered Advisor Dr Bill, who was the vital

and kinetic force of this work. My immense thanks to Dr Ananda R for his help and support, I am sincerely grateful to Dr Selvam, for his motivational inspiration and support.

REFERENCES

1. Rao CR, Kamath VG, Shetty A, Kamath A. A cross-sectional analysis of obesity among a rural population in coastal Southern Karnataka, India. *The Australasian Medical Journal* 2011; 4(1): 53.
2. www.who.int/mediacentre/factsheets/fs311/en Cited on 15.05.2019
3. Kalra S, Unnikrishnan AG. Obesity in India: The weight of the nation. *Journal of Medical Nutrition and Nutraceuticals* 2012; 1(1): 37.
4. Rao CR, Kamath VG, Shetty A, Kamath A. High blood pressure prevalence and significant correlates: a quantitative analysis from coastal Karnataka, India. *ISRN preventive medicine* 2012; 2013.
5. World Health Organization. *The Asia-Pacific perspective: redefining obesity and its treatment*; 2000.
6. Gill T. Epidemiology and health impact of obesity: an Asia Pacific perspective. *Asia Pac J Clin Nutr* 2006; 15(Suppl): 3-14.
7. Shamseddeen H, Getty JZ, Hamdallah IN, Ali MR. Epidemiology and economic impact of obesity and type 2 diabetes. *Surgical Clinics* 2011; 91(6): 1163-72.
8. Misra R, Patel T, Kotha P, Raji A, Ganda O, Banerji M, Shah V, Vijay K, Mudaliar S, Iyer D, Balasubramanyam A. Prevalence of diabetes, metabolic syndrome and cardiovascular risk factors in US Asian Indians: results from a national study. *Journal of Diabetes and its Complications* 2010; 24(3): 145-53.

Cite this article as:

Kamath Madhusudhana. The effect of inter professional approach in management of Obesity: An Observational Study. *Int. Res. J. Pharm.* 2020;11(5):57-59 <http://dx.doi.org/10.7897/2230-8407.110555>

Source of support: Nil, Conflict of interest: None Declared

Disclaimer: IRJP is solely owned by Moksha Publishing House - A non-profit publishing house, dedicated to publishing quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IRJP cannot accept any responsibility or liability for the site content and articles published. The views expressed in articles by our contributing authors are not necessarily those of IRJP editor or editorial board members.