ORIGINAL RESEARCH PAPER
Volume - 11 | Issue - 04 | April - 2022 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

KNOWLEDGE, ATTITUDE, AND PRACTICES ABOUT LIFE STYLE DISEASES AMONG MEDICAL PROFESSIONALS IN A TERTIARY CARE CENTRE

General Medicine

Dr.Mookambika R.V* Associate Professor Department of General Medicine Sree Mookambika Institute of Medical Sciences Kulasekharam. *Corresponding Author

Dr. Venkatesh Babu Department of General Medicine Sree Mookambika Institute of Medical Sciences Kulasekharam.

Dr.Rakuk Nambiar Senior Resident Department of General Medicine Sree Mookambika Institute of Medical Sciences Kulasekharam.

ABSTRACT

Background: Knowing the medical Professionals' knowledge, attitude and practices of nutritional and lifestyle habits helps toenhance the nutrition of the community, which will consequently lead to a healthier society, as they will constitute the mainbody of future health promoters .
Aims &Objectives:. To assess the knowledge, attitude, and practices about lifestyle diseases among medical professionals in a tertiary care centre
Methodology: A cross-sectional study included 82 medical professionals between ages 23-30 years from medicals of medical college. A self-reported questionnaire was employed to assess perceived attitude and barriers to healthy practices by thestudy participants.
Results: Majority of the medical professionals had good knowledge ,attitude and practice on life style diseases.
Conclusion: Overall most medical professionals were aware of the importance of healthy eating habits and regular physical activity yet they were notpracticing it adequately in their daily life. Improving nutrition knowledge, attitude and dietary practices through nutritionaleducation and motivation for regular physical exercise may help to prevent many lifestyle diseases.

KEYWORDS

Knowledge, Attitude, Practice, lifestyle diseases,medical professionals

INTRODUCTION:

Knowledge can influence health-related behaviours when informing attitudes, and beliefs [1]. Whilst it is acknowledged that nutrition forms an important part of health management, it has been reported that nutrition training of medical professionals is inadequate in both quality and quantity [2]. It is often assumed that the medical professionals have a greater knowledge about healthy lifestyle and dietary habits when compared to non-medicals. However there is no evidence to indicate that this knowledge translates into maintaining good health practices [3]. Healthy dietary habits among medical professionals are even more important as they are future health promoters and those who personally ignore adopting healthy lifestyle are more likely to fail to champion health promotion opportunities .Many programs have shown that adoption of new behaviour or modification of the existing behaviour needs much input like knowledge, awareness of the matter, attitude, and perception. Most authors found that whilst behaviours are unlikely to change without an increase in knowledge, knowledge alone is insufficient to bring about significant improvement in preventive behaviour. Knowledge can however, influence health-related behaviour or life styles when mediated by attitudes, belief, self-efficacy, and an effective call to action [1].The metabolic syndrome (MS) is a cluster of risk factors that predisposes an individual to increased risk of Life style diseases like chronic noncommunicable diseases (NCDs). According to the findings of Hu et al., persons with the MS have an increased risk of death from many complications including cardiovascular diseases (CVDs)[4].

AIMS & OBJECTIVES:

To assess the knowledge, attitude, and practices about lifestyle diseases among medical professionals in a tertiary care centre

METHODOLOGY:

STUDY DESIGN: Cross sectional study
STUDY PERIOD: August 2021-December 2021

STUDY SETTING:

SreeMookambika Institute of Medical Sciences, Kulasekharam, Kanyakumari district, Tamil Nadu

STUDY PARTICIPANTS:

Medical professionals of Sree Mookambika Institute of Medical Sciences

INCLUSION CRITERIA:

All Medical professionals from SreeMookambika Institute of Medical Sciences ageing from 23 to30.

Exclusion Criteria:

Those who are not willing to participate in the study.

Sample Size Calculation:

Based on the study conducted by EmanMokbel Alissa etal[5] showing a prevalence of 75-94%, sample size was calculated using the formula taking an average prevalence of 71% Applying in the formula ,$4pq/d^2$

P-71%
=4x71x(100-71)/(10)
= 82

Data Collection Tool:

Modified Structured questionnaire [8] including questions on demographic details, dietary habits, physical activity and stress.

Study procedure:

After approval of study protocol from the Institutional Research Committee and Institutional Human Ethical Committee written and informed consent was taken from the study participants attending the outpatient departments of Sree Mookambika institute of medical sciences, Kulasekharam.

Variables and techniques:-

Qualitative variables expressed as frequencies and percentages - Quantitative variables expressed as Mean and Standard Deviation. . The p value of less than 0.05 was set as the level of significance .Data were entered in Microsoft Excel (Windows 7; Version 2007) and analyses were done using the Statistical Package for Social Sciences (SPSS) for Windows software (trial version 22.0; SPSS Inc, Chicago)

Funding: NIL

RESULTS:

Among the 82 medical professionals of this study 80% had good knowledge and 20% had poor knowledge on lifestyle diseases. 59.8% (n=49) had positive attitude and 40.2% (n=33) had negative attitude towards lifestyle diseases 78% showed good practice towards lifestyle diseases.Out of 82 medical professionals who were tested (100%)had knowledge on lifestyle diseases, (74.4%) answered correctly about components of lifestyle diseases.93.9 swere aware that obesity can be assessed by BMI. Regarding physical inactivity is a major risk factor diabetes (61%) scored 5, (35.4) scored 4, (3.7) scored 3.

Attitude About Lifestyle Diseases:

knowledge	Frequency	percentage

Which of the following are lifestyle diseases	Score	0 1	21 61	25.6% 74.4%
Obesity can be assessed by an entity called BMI	Score	0 1	4 78	4.9% 95.1%
Abdominal fat is dangerous than overall increase in the distribution of fat in terms of causing increased cardiovascular problems	Score	0 1	5 77	6.1% 93.9%
Excessive consumption of refined foods (bread/biscuits/ momos, etc.) leads to weight gain	Score	0 1	4 78	4.9% 95.1%
Constant mental stress is a major risk factor for hypertension	Score	0 1	6 76	7.3% 92.7%

Most (59.8%) of medical professionals had a positive attitude towards healthy eating habits and regular physical activity. Almost half of the medicals agree that physical exercises and healthy eating habits promote and maintain good health. About (80.5%) of medicals consider their current weight to be harmful for their health. About 96.3% were very confident that they would prefer salads/low calorie snacks.

ATTITUDE			FREQUENCY	PERCENTAGE
Do you think lifestyle diseases impart a major health risk for upcoming generations	Score	0 1	1 81	1.2% 98.8%
I consider my current weight to be harmful for my health	Score	0 1	16 66	19.5% 80.5%
I am confident that I would prefer salads/low calorie snacks to prevent from lifestyle diseases	Score	0 1	3 79	3.7% 96.3%
I am satisfied of my current physical activity level	Score	0 1	5 77	6.1% 93.9%
I am confident that I would do physical activities such as jogging, bicycling, swimming, competitive sports, or any other activity that makes me healthy	Score	0 1	7 75	8.5% 91.5%

Practice About Lifestyle Diseases:

Most of the medical professionals have good practice about healthy eating habits and are doing regular physical activity. Only few of study population responded that they practice physical exercises .Their statement says that they exercise, but not in regular schedule. Regarding daily use of stairs (i.e., 1 floor counts as 1 time), 25.6% of the study cohort admitted to use them 3-4times, 57.3% used them 5-10times and they were used ≥10times by 15.9%.

PRACTICE			FREQUENCY	PERCENTAGE
I take sweet dish after meals	SCORE 0 1	49 33	59.8% 40.2%	
I eat in response to stress	SCORE 0 1	57 25	69.5% 30.5%	
I drink sugar sweetened beverages	SCORE 0 1	11 71	13.4% 86.6%	
Apart from the three major meals and two minor meals, how many snacks do you usually consume in a day	SCORE 0 1	12 70	14.6% 85.4%	
I include fruits/salads in my diet	SCORE 0 1	4 78	4.9% 95.1%	
How often do you exercise	Never	SCORE 0	75	91.5%
	Once in 15 days		7	8.5%
	1-3 times/week			
	4-6 times/week			
	Everyday			
How often do you use stairs per day (1 floor counts as 1 time)	1-2 times	SCORE 0	3	3.7%
	3-4 times			
	5-10 times	1	79	96.3%
	> 10 times			
Which of the following statements best applies to you.	I currently do not exercise and do not intend to start regular exercise in next 6 months	SCORE 0 1	77 5	93.9% 6.1%
	I currently do not exercise and intend to start regular exercise in the next 6 months			
	I currently exercise but not regularly			
	In the last 6 months I have started exercising regularly			
	I currently exercise regularly and have done so for more than 6 months			

DISCUSSION:

This study aimed to evaluate nutrition knowledge, eating habits, physical activity and overall perception regarding importance of healthyeating habits and physical activities of medical professionals of SreeMookambika Institute of Medical Sciences. Medical college life is potentially important target for thepromotion of healthy lifestyle of the young adult population.Unlike previous results that reported the female medicals achieved better scores than male medicals on nutritional knowledge and attitude **[9].** Our study shows both female and male medical professionals achieved equal scores on nutritional knowledge and attitude. Some studies have shown that medical professionals are only slightlyaware of nutrition issues and their knowledge and attitude are average **[10].** Other studies have shown that medical professionals had a superior level of knowledge on health issues regardingdiet, lifestyle and exercise and this was replicated in the current study **[9].**Overall, most medical college professionals are not familiar with healthy foods needed for their body in different conditions **[11]** and need to havenutrition education programs **[12].**Lack of health consciousness amongst the general medical population has been observed in other studies where medicoswere practicing unhealthy dietary habits and made inappropriate choices **[13][14].** Nevertheless, medical professionals did not make an extra effort to choose a healthierlifestyle or to eat healthy food. This is consistent withpervious researches which showed that medical professionals hada greater knowledge on health issues and their implications,nonetheless they were not putting this knowledge intopractice due to certain barriers **[15].**There was a large proportion of medicalgraduates who perceive their lifestyles to bemoderately or highly stressful and linked to lack of proper time management **[16].**

Decreased levels of physical activity and leisure arelinked to increases in the prevalence of an overweightcondition, obesity and diet related non-communicablediseases among young generations **[17] [18].** Apparentlythe two main barriers mainly identified by the participantsof most studies on similar populations were lack of timeand stress.Most medical graduates claim not to have enough time toexercise and eat healthier meals due to the demands of theirstudies and clinical rotations in the respective wards **[17][19].**Hence medical professionals are unable to translate knowledge into better practice. However, the use of time as barrier toexercise by young people is disturbing. One possibility is thattime is not a true barrier, but rather an excuse for nonparticipation.About 2.4% of the study population reportedthat they currently exercise regularly and have done so for more than 6 months,41.5% reported that they currently exercise but not regularly, 45.1% reported that they currently do not exercise and intend to start regular exercise in the next 6 months.Previous studies show thatindividuals that have basic nutrition knowledge and attitudeapply these principles when selecting foods and alsoindicated that Food faddism is one among many influencingfactors on medicals food choices**[20].** Nutrition education and physical education as one of the important practical aspects of nutritionknowledge and exercise knowledge, plays an important role in raising publicawareness and ultimately health of society **[21].** Nutrition education programs may have important uses instudying the behavioural determinants of healthy eatingpatterns where an integrated measure of diet can be used as the outcome of interest **[22].** They can also be used inmonitoring and surveillance to assess how well people comply with dietary guidelines, to monitor trends in the population over time, and to target exercise, diet and nutrition messages for the public.Our study mainly shows that the medical professionals lack the physical activities and they don't

exercise regularly. Most of the study group eat on response to stress level. When comparing with the knowledge and the attitude of the medical professionals the practice regarding that finds to be poor.Hence the practice must be improved for the better living.

CONCLUSION:

Overall most medical graduates were aware of the importance of healthy eating habits yet they were not practicing it adequately in their daily life. Improving nutrition knowledge, attitude and dietary practices through nutritional education may help to prevent many nutrition related diseases.The results of our study may shed some light on the importance of establishing the evidence-based data for effective curriculum development on healthy eating, regular physical activity, avoiding stress full life, construction of health education materials for the prevention of lifestyle diseases among young youth, and most of all, for the provision of nutrition education and physical training to the medical professionals for adoption of healthy eating and regular physical activity among the medicalprofessionals.

Limitations

The study population represents only a small fraction of the medical community. So, the results available from this cannot be generalised for the whole community.

Recommendations

A larger sample size and a multi-centric study will help to arrive at a more statistically significant result.

REFERENCES:

[1] Green L and Kreuter M. Health Promotion Planning: An educational and ecological approach, 3rd ed. Educational and ecological assessment of factors affecting health-related behavior and environment. Mountain View, CA: Mayfiled 1999, pp152-157.

[2] Cotugna, N.; Connie, E.; Vickery, R.D.; Sheldon, M. Sports Nutrition for Young Athletes. Journal Scandinavia Nutrition 2005; 21(6): 323–328.

[3] Sakamaki R, Toyama K, Amamoto R, Liu CJ, Shinfuku N. Nutritional knowledge, food habits and health attitude of Chinese university students—a cross sectional study. Nutr J 2005; 4: 4.

[4] Hu G, Qiao Q, Tuomilehto J, Balkau B, Borch-Johnsen K, Pyorala K, et al. Prevalence of the metabolic syndrome and its relation to all-cause and cardiovascular mortality in nondiabetic European men and women. Arch Intern Med. 2004;164:1066–76]

[5] EmanMokbel Alissa, HendAlsawadi, AsmaZedan, DalyaAlqarni, Maria Bakry, Nojoud Bin Hli. Knowledge, Attitude and Practice ofDietary and Lifestyle Habits Among Medical Students in King Abdulaziz University, Saudi Arabia. *International Journal of Nutrition andFood Sciences.* Vol. 4, No. 6, 2015, pp. 650-655. doi: 10.11648/j.ijnfs. 2015 0406.18

[6] Knowledge, Attitudes, and Practices on Lifestyle and Cardiovascular Risk Factors Among Metabolic Syndrome Patients in an Urban Tertiary Care Institute in Sri LankaPriyanwadaAmarasekara, Angela de Silva, HasinthiSwarnamali, UpulSenarath, Prasad KatulandaAsia Pac J Public Health. Author manuscript; available in PMC 2016 Apr 17.Published in final edited form as: Asia Pac J Public Health. 2016 Jan; 28(1 Suppl): 32S–40S. Published online 2015 Oct 28. doi: 10.1177/1010539515612123

[7] Knowledge, attitude and practices toward health behavior and cardiovascular disease risk factors among the patients of metabolic syndrome in a teaching hospital in IndiaAnjanaVerma, Shefali Mehta, Aditi Mehta, Ashish PatyalJ Family Med Prim Care. 2019 Jan; 8(1): 178–183. doi: 10.4103/jfmpc.jfmpc_257_18

[8] Development and Validation of a Questionnaire Assessing Knowledge, Attitude, and Practices about Obesity among Obese IndividualsS. R. Reethesh, PiyushRanjan, Charu Arora, G.S Kaloiya, Naval K. Vikram, Sada N. Dwivedi, Viveka P. Jyotsna, Manish SonejaIndian J EndocrinolMetab. 2019 Jan-Feb; 23(1): 102–110. doi: 10.4103/ ijem.IJEM 487 18 PMCID: PMC6446687

[9] Hendrie, G.A., J. Coveney, D. Cox. Exploring nutritionknowledge and the demographic variation in knowledge levelsin an Australian community sample. Pub. Health. Nutr., 2008;11(12): 1365-71

[10] Lowry, R., D.A. Galuska, J.E. Fulton, H. Wechsler, L. Kannand J.L. Collins Jan. Physical activity and weight management goals and practices among US college students. Am. J. Prev.Med., 2000; 18: 18-27.

[11] O'Dea, A. Jennifer. School-based health education strategies for the improvement of body image and prevention of eating problems. An overview of safe and successful interventions. J. Health Educ., 2004; 105(1): 11-33.

[12] Robinson-O'Brien, R., N. Larson, D. Neumarkof-Sztainer, P.Hannan and M. Story. Characteristics and dietary patterns of adolescents who value eating locally grown, organic,nongenetically engineered and no processed food. J. Nutr.Educ. Behav., 2009; 41(1): 11-8.

[13] Carter AO, Elzubeir M, Abdulrazzaq YM, Revel AD, Townsend A. Health and lifestyle needs assessment of medical students in the United Arab Emirates. Med Teac 2003; 25: 492-6.

[14] Silliman K, Rodas-Fortier K, Neyman M. A Survey of Dietary and Exercise Habits and Perceived Barriers to Following a Healthy Lifestyle in a College Population. Californian J Health Promot 2004; 18: 281.

[15] Georgia, S.; Guldan, Y.W.; Lin, Y.; Zhao, M.; Xiang, D.P.; Yang, L.; Long, F. Evaluation of a nutrition education activity for medical student in china. Asia Pacific Journal of Clinical Nutrition, 1993; 2(8): 71-76.

[16] Khawla M, Landman J, Musaiger A. Nutrition knowledge, attitudes and practices: a comparison between medical practitioners and medical students. Bahrain. Health Education 2003; 104 (2): 90-99.

[17] Troyer D, Ullrich IH, Yeater RA, Hopewell R. Physical activity and condition, dietary habits, and serum lipids in second-year medical students. J Am CollNutr 1990; 9: 303-7.

[18] Du S, Lu B, Zhai F, Popkin BM: A new stage of the nutrition transition in China. Public Health Nutr 2002; 5: 169-74.

[19] Conroy MB, Delichatsios HK, Haffler JP, Rigotti NA. Impact of preventive medicine and nutrition curriculum for medical students. Am J preventive medicine 2004; 27: 77-80.

[20] Read, M., &Schlenker, E. D. Food selection patterns among the aged. In J. M. Smith (Ed.), Nutrition in Aging 1993;pp. 45–53. 2nd ed. St. Louis, MO: Mosby Inc.

[21] Harvey-Berino J, Hood V, Rourke J, Terrance T, DorwaldtA, Secker-Walker R. Food preferences predict eating behavior of very young Mohawk children. J Am Diet Assoc. 1997; 97(7): 750-3.

[22] Rafferty AP, Anderson JV, McGee HB, Miller CE. A healthy diet indicator: quantifying compliance with the dietary guidelines using the BRFSS. Prev Med. 2002; 35: 9–15.