Website: www.ijhsr.org ISSN: 2249-9571

# A Study to Evaluate the Pharmaceutical Services to Decode the Myths Related to Non-Pharmacological Care

Nypunya K.<sup>1</sup>, Sandhrima Sudhakaran<sup>2</sup>, Ateendra Jha<sup>3</sup>, Shabaraya A. R.<sup>4</sup>

<sup>1-4</sup>Department of Pharmacy Practice, Srinivas College of Pharmacy, Valachil, Mangalore

Corresponding Author: Nypunya K.

#### **ABSTRACT**

As per WHO, Health is a condition of complete physical, mental and social prosperity and not simply the non-attendance of disease or sickness. Well-being related misconceptions are normal and emerge for an assortment of reason. With regards to wellbeing it's ideal to depend on the data dependent on realities. Treatment turns out to be more troublesome if misconception conquer the remedial directions, which eventually prompts decay of the medical care administrations.

The main objective of the study was to find out the attitude of the general community on myths of health care management and lifestyle, to give pharmaceutical counseling to clear myths, and to reaccess the attitude of community on their past myths.

A survey-based interventional study on 200 study subjects in the Mangalore region for a duration of 6 months was conducted as per the Ethics Committee of Srinivas Institute Of Medical Science and Research Centre. The study populations included in the study were adults above 18 years of age, who can understand English/Malayalam. Data were analyzed with the help of excel 17 and SPSS 20.

In our study survey was conducted out on 200 subjects of the Mangalore region. And from a total of 200 subjects, it was observed that 92(46%) subjects were male and 108(54%) were female. The subjects in the present study were not aware or don't have adequate knowledge regarding the myths and facts related to health care and lifestyle. The study found that 71-80% of subjects were following the myths and was not aware of the fact. And after giving the counseling the study exhibited that majority of our subjects started to unfollow the misconceptions.

Our study highlights the role of the pharmacist to rule out the myths regarding lifestyle by giving counseling to the community and after reassessing, we could find a change in people's attitudes towards the myths. Through our counseling, we are able to bring awareness among common people about lifestyle management so we are able to prevent the risk that may occur due to misconceptions among common people. Thus this study analyzes the effectiveness of clinical pharmacists in giving the perception regarding myths and can decrease the burden of the other health care professionals.

Thus this study analyzes the effectiveness of clinical pharmacist in giving the perception regarding myths and can decrease the burden of the other health care professionals.

Keywords: myth, facts.

#### **INTRODUCTION**

According to WHO, Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. It refers not only to the absence of disease, but the ability to recover and bounce back from illness and other problems. Factors for good health include

genetics, the environment, relationships, and education. A healthful diet, exercise, screening for diseases, and coping strategies can all enhance a person's health. <sup>1</sup>

We strive almost every day to achieve the preferable body; exercising, eating the right kinds of food with the precise amount of nutrients. However, while competing every day, we can hear plausible myths about health and wellness. Myths will hold on to peoples mind because we cohere to biases we already have in the first place. We usually only select selected information that is consistent with what we already believe or want to think about. Medical myths continue for number of reasons, including physiological beliefs, case reports, and culture. It's an arena where nonjudgmental scientific interactions and deep seated emotional interactions are common, so it is not surprising that some things can be mis-interpreted or mis-represented.

With the worst healthcare provider and patient rating we strive to provide the right health services to the one in need. And it gets even worse when some myths start rumoring around the healthcare system. Treatment becomes more difficult when myths overrule medical prescriptions which in turn lead to decline in healthcare services. boundless appropriation of data innovation (IT) carries numerous possible advantages to medical care. Simultaneously, issues with IT can upset the conveyance of care and improve the probability of new, frequently unexpected mistakes influence the wellbeing and nature of clinical consideration and may prompt patient language. <sup>2</sup>

Myths are perpetuated by telling and retelling. They also have value: in other contexts they are a source of comfort, and help people explain where they come from, why the world is as it is, and why things are the way they are. However they should have no such privileged place in evidenceinformed public health. As new data become available, we would encourage public health practitioners and researchers to dispel myths when opportunities present themselves to do so as part of a commitment to evidence-informed public health practice and the evolution of public health training programs and curricula. We have presented a selection of salient and pervasive myths in public health. As the field continues to develop and debate, it is likely that more myths will be generated and it is fully acknowledged that there is a larger set of myths in our field.

#### **METHODOLOGY**

An Interventional study was conducted for the duration of 6 months in Dakshina Kannada. The study was limited for a sample of 200 based on the time schedule allotted for the project including other circumstances The study protocol was the Institutional Ethics approved bv Committee of Srinivas Institute Of Medical Science and Research Centre, Mukka, Mangalore (Reference number: 2019/10/28/6). Subjects more than 18 years old, can understand English/Malayalam were included in the study and the Subjects less than 18 years old, cannot understand English/Malayalam were excluded in the study. Inform consent form was prepared in Malayalam and English and same were used. Before selection of subjects the consent form was orally explained to the study subjects before filling it. The data of the subjects were collected using a data collection form from Dakshina Kannada through direct interaction with the subjects. Data collected include subjects gender, age, socio demographic details. After filling the pre counselling form the subjects were given awareness regarding the myth and fact, then in the following month post counselling form were filled. The collected data was analyzed by using excel 17 and SPSS 20.

#### **RESULT**

# DEMOGRAPHIC DETAILS OF STUDY POPULATION:

A total of 200 subjects were enrolled in the study. From the collected data it was observed that 92 (46%) subjects were male and 108 (54%) were female.

Nypunya K. et.al. A study to evaluate the pharmaceutical services to decode the myths related to non-pharmacological care.

#### **GENDER**

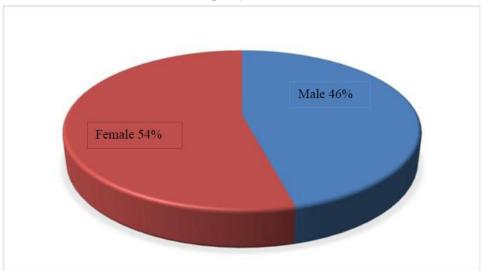


Figure 1: Demographic details of study population

## DEMOGRAPHIC DETAILS ACCORDING TO EDUCATIONAL QUALIFICATIONS:

Out of the 200 subjects 143 (71.5%) were Degree/pg ,11 (5.5%) were High

school, 27 (13.5%) were Intermediate, 4 (2%) were Middle school, 5 (2.5%) were Primary school, 10 (5%) were Professional.



Figure 2: Demographic details according to educational qualifications

### ASSESSMENT OF KNOWLEDGE: Knowledge regarding the myth and fact:

Out of 200 samples 100 (50%) of people disagreed to -You should drink at least eight glasses of water a day before counselling and it has increased to 166 (83%) after counselling. Only 79 (39.5%) people disagreed to -High blood pressure is an old age disease to pre counselling and it increased to 154 (77%) to post counselling. Out of the total samples 96 (48%) people

disagreed to -Reading in dim light ruins your eyesight before counselling and it climbed to 166 (83%) after counselling. 57 (28.5%) people disagreed to -Egg Yolks Are Bad for You before counselling and it increased to 130 (65%) after counselling. From 200 samples 66 (33%) people disagreed to -Cracking Knuckles Leads to Arthritis and it shoots up to 168 (84%) after counselling. 110 (55%) people disagreed to -I should be eating for two while I am

Nypunya K. et.al. A study to evaluate the pharmaceutical services to decode the myths related to non-pharmacological care.

pregnant before counselling and it increased to 177 (88.5%) after counselling. 99 (49.5%) people disagreed to -Pregnant women should avoid exercise before counselling and it increased to 174 (87%) after counselling. For the myth -It's best to keep medication handy, by the bathroom or kitchen sink as it's easy to approach and remember 92 (46%) disagreed before counselling and it shoots up to 172 (86%). 98 (49%) disagreed to -You Should Remove

Sugar Entirely from Your Diet before counselling and it increased to 176 (88%) after counselling. 51 (25.5%) people disagreed to -If You Exercise, You Can Eat What You Want before counselling and it shoots up to 136 (68%) after counselling. And for the myth -Don't drink milk when you have cold 59 (29.5%) disagreed before counselling and it increased to 144 (72%) after counseling (Table 1).

Table 1: Lifestyle related myths

LIFESTYLE	PRE			POST		chi-	P
RELATED MYTHS		COUNT	%	COUNT	%	square with Yates correction	VALUE
You should drink at least eight glasses of water a day.	Agree	100	50%	34	17%	47.41	< 0.00001
	Disagree	100	50%	166	83%		
High blood pressure is an old age disease.	Agree	121	60.5%	46	23%	56.29	< 0.00001
	Disagree	79	39.5%	154	77%		0.00001
Reading in dim light ruins your eyesight.	Agree	104	52%	34	17%	52.67	< 0.00001
	Disagree	96	48%	166	83%		
Egg Yolks Are Bad for You.	Agree	143	71.5%	70	35%	52.06	< 0.00001
	Disagree	57	28.5%	130	65%		
Cracking Knuckles	Agree	134	67%	32	16%	105.04	<
Leads to Arthritis.	Disagree	66	33%	168	84%		0.00001
I should be eating for two while I am	Agree	90	45%	23	11.5%	53.73	53.73 < 0.00001
pregnant.	Disagree	110	55%	177	88.5%		
Pregnant women Should avoid exercise.	Agree	101	50.5%	26	13%	63.18	< 0.00001
	Disagree	99	49.5%	174	87%		
It's best to keep medication handy, by the bathroom or Kitchen Sink as it's easy to approach and remember.	Agree	108	54%	28	14%	69.53	0.00001
	Disagree	92	46%	172	86%		
You Should Remove Sugar Entirely	Agree	102	51%	24	12%	68.69	68.69 < 0.00001
from Your Diet.	Disagree	98	49%	176	88%		
If You Exercise, You Can Eat What You Want.	Agree	149	74.5%	64	32%	70.86	0.00001
	Disagree	51	25.5%	136	68%		
Don't Drink Milk when you have cold.	Agree	141	70.5%	56	28%	70.58	<
	Disagree	59	29.5%	144	72%		0.00001

Table 2: Percentage variation

PERCENTAGE	PRE	POST
0-10%	5	0
11-20%	26	0
21-30%	46	0
31-40%	36	0
41-50%	38	0
51-60%	21	0
61-70%	22	29
71-80%	4	81
81-90%	2	58
91-100%	0	32

The table shows the percentage of people who said the correct answers before

the counselling and after the counselling. Before the counselling only a few number of people said the correct answers. That is only 4 people were between 71-80% while only 2 people were in category 81-90%. So we can understand that out of 200 people less than 10 people have a good knowledge regarding the myth. The rest of the people were following the myths that persist in the society. Before the counselling 5 people came between 0-10%, 26 people came

between 11-20%, 46 people came between 21-30%, 36 people came between 31-40%, 38 people came between 41-50%, 21 people between 51-60% and 22 people between 61-70%.

After the counselling a drastic increase in the number of people who answered the correct answers were noticed. Nobody came below 60%. 29 people came between 61-70%, 81 people came between 81-90% and 32 people came between 91-100%. That is after the counselling many people started to ignore the myth that was persisting in our society.

#### **DISCUSSION**

Myths can cause deteriorating effect on patient's health. Myth related to heath care services not only increases the burden on healthcare system but also worsening the condition of patients. Kishore J et al did a study titled "Myths, beliefs and perceptions about mental disorders and health-seeking behaviour in Delhi, India" and concluded myths and misconceptions significantly more prevalent in rural areas than in urban areas and among medical professionals. They also reported that, the people need to be communicated to change their behaviour and develop a positive attitude so that health-seeking behaviour can improve.<sup>3</sup>

When we analysed the responses for "Drinking eight glasses of water in a day" in our study and half of the people believed that they should drink at least eight glass of water a day. Fact is that there is no scientific evidence to support the claim that an average human needs to drink eight glasses of water a day. Aaron E Carroll did a study titled "Persistent health myth of eight glasses of water a day" and found that water is present in fruits and vegetables, so you don't need to consume eight glasses of water throughout the day. Also, you don't need to worry about feeling thirsty. The human body is tuned to signal you to drink long before you are actually dehydrated. 4

While analysing the responses of "High blood pressure is an old age disease" we came to know that in our study more than half of the study population believed that high blood pressure is an old age disease. Fact is that as per WHO high BP affects every third person above age 18, so it is important to maintain your blood pressure normal. Heart disease and stroke caused by high blood pressure are the first and fifth leading causes of death in the U.S. Untreated hypertension damages the heart and other organs and can lead to life threatening conditions that include heart disease, stroke and kidney disease. Damaris Ogake ondimu et al did a study titled "Risk factors for hypertension among young adults (18-35) years attending in tenwek mission hospital, Bomet Country, Kenya in 2018". It says that prevalence hypertension in younger adults is not as low as generally perceived. 5

Half of the study populations believed that pregnant women should avoid exercise. In fact exercise in pregnancy has multiple benefits for the mother, including reduced risk of mental health problems, diabetes and hypertension and fast recovery after delivery. There are no proven risks to foetus if practiced safely. Understanding the physiological changes of pregnancy and the possible complications of high intensity of contact sport is important but in general, moderate level of exercise 3-4 times per week is safe for both mother and baby in low risk pregnancies. <sup>6</sup>

In our study more than half of the study population believed that "If You Exercise, You Can Eat What You Want". Fact is that our individual metabolism determines how many calories we burn at rest and during exercise. If we eat more calories than we burn on a constant basis our bodies will accumulate these extra calories as fat regardless of the amount of exercise that we do.

After the post counselling analysis, we came to know that majority of the study population are aware of the facts associated with the myths. We checked the attitude of

community on their past myths and after one-month, majority of the study population were aware about facts associated with the pharmacological and non-pharmacological myths. Due to increasing health care burden the myths still persists in the community, due to certain limitations the people are not getting enough counselling about the medications, lifestyle management. Pharmacists can play a major role in reducing these misconceptions associated with healthcare and lifestyle management. Several research studies suggest that interventions by a clinical pharmacist had a major impact on reducing prescribing errors in the study period, thus improving the quality and safety of care provided.

Tahniyath F et al did a study titled "Clinical Pharmacist- A Need for the Society" and the clinical pharmacists are granted patient care privilege by interacting with physicians or health systems that allow them to perform medication decision making functions as part of the patient's health care team to promote rational use of drugs for patient's safety and to improve patient care, level of attention and disease management result in control of risk factors and decline in health care costs. Thus, Clinical Pharmacists are an asset for health care team and patients.

In the same manner this study also has clearly shown that percentage of people following the myths were very high, prior to the counselling. The pharmaceutical care in the form of counselling, to create awareness among the general public has emerged as an effective tool. It will not only reduce the burden on health sector due to health complication resulted because of myths, but also reduce the health care cost for the patients.

#### **CONCLUSION**

Nowadays a lot of myths persist in our society for many reasons including health care and lifestyle. Currently, our study shows that lifestyle-related myths are ruling more among the people which may increase the burden on the health care system but also deteriorating the condition of patients. In this study, an effort has been made to give the counselling to clear the myths and to recess the attitude of the community on their past myth. Our study highlights the role of the pharmacist to rule out the myths regarding lifestyle by giving counselling to the community and after reassessing, we could find a change in people's attitudes towards the myths. Through our counselling, we are able to bring awareness among common people about drug lifestyle management so we are able to prevent the risk that may occur due to misconceptions among common people. Thus, this study analyses the effectiveness clinical pharmacist in giving perception regarding myths and decrease the burden of the other health care professionals.

#### REFERENCE

- 1. Jadad A, O'Grady L. How should health be defined? BMJ.2008;337 (dec101):a2900-a2900.
- 2. The 20 Health and Wellness Myths That Can Negatively Influence Your Wellbeing [Internet]. Develop Good Habits. 2020 [cited 29 February 2020]. Available from: https://www.developgoodhabits.com/health-myths/
- 3. Kishore J, Gupta A, Jiloha RC, Bantman P. Myths, beliefs and perceptions about mental disorders and health-seeking behavior in Delhi, India. Indian journal of Psychiatry. 2011 Oct;53(4):324.
- 4. Carroll AE. No, you do not have to drink 8 glasses of water a day. New York Times. 2015 Aug 24;24.
- 5. Ondimu DO, Kikuvi GM, Otieno WN. Risk factors for hypertension among young adults (18-35) years attending in Mission Hospital, Tenwek **Bomet** County, Kenya in 2018. Pan Afr Med J. 2019 Jul 16;33:210. doi: 10.11604/pamj.2019.33.210.18407. PMID: 31692887; PMCID: PMC6814951.

Nypunya K. et.al. A study to evaluate the pharmaceutical services to decode the myths related to non-pharmacological care.

- 6. Practitioners T. RACGP Exercise in pregnancy [Internet]. Racgp.org.au. 2020[cited 23 May 2020]. Available from:
  - https://www.racgp.org.au/afp/2014/augu st/exercise-in-pregnancy/
- 7. Tahniyath F. Clinical Pharmacist-A Need for the Society. Indian Journal of Pharmacy Practice. 2017 Jan;10(1):59.

How to cite this article: Nypunya K., Sudhakaran S, Jha A et.al. A study to evaluate the pharmaceutical services to decode the myths related to non-pharmacological care. *Int J Health Sci Res.* 2021; 11(3): 149-155.

\*\*\*\*\*