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KNOWLEDGE, ATTITUDE AND PRACTICE ON THE USE OF SELF-MEDICATION AMONG GENERAL POPULATION IN CHENNAI DURING LOCKDOWN-2020

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ABSTRACT

Background: Self-medication which is defined as the treatment of common illness to treat minor symptoms without any medical supervisor.

Materials and methods: The study was conducted in a gated community in porur locality in Chennai where more than 2000 people were living in this community. The research design conducted is a cross sectional online KAP survey. The obtained data was analysed by using the Statistical Package of Social Sciences (SPSS) version 24 to validate and analyse the entries.

Results: Shows that most of the participants were in the age group of 50-59 years of age that accounts about 29.5%. The reasons to self-medicate during the lockdown period were mostly due to previous illness in treating similar symptoms (47.4%). Attitude among the respondents in which a high number of positive attitude among the residents and in A2 (72.2%). It is noted that P1 (55.1 %) majority of the respondents preferred self-medication during the lockdown period.

Conclusion: The study had found out that the majority of the residents had preferred self-medication during the lockdown period.

Key words: Self-medication, Covid-19, Pandemic

INTRODUCTION:

Self-medication which is defined as the treatment of common illness to treat minor symptoms without any medical supervisor. Admst of the COVID-19 pandemic which has been spreading world-wide had affected many individuals both physically and mentally [1, 2]. Since there were no definite treatment or vaccine been issued and also the drastic spread of the virus was rapid, the government had announced a lockdown for people safety and benefit. Due to this scare which the pandemic has brought to the people all around the world individuals have started to self-medicate themselves without having any symptoms just to prevent them from the virus [3, 4]. Some individuals have started buying medication from online websites by checking through internet, getting information from social media platforms, friends and family, television and newspapers about the drugs being prescribed for patients who have been affected with COVID-19 [5, 6]. Many people also use old prescription and buy the medications from the pharmacy to treat their current symptoms. In India ongoing Google search is using traditional medicines which included herbal

concoction and herbal immune boosting supplement products had brought an influence among the people [7]. Most of the individuals practice this therapy in order to treat symptoms like fever cough cold and sore throat. Stocking vitamin supplements to boost their immunity was another medication practice which was followed. This infodemic news that has been spread all around the world had no clinical effect on treating SARS CoV2 and that is the reason people remain at their homes and self-medicate as it is easily accessible [8-10]. Since then, there is rise in cases of COVID-19 due to the adverse effects of consuming these medications. The role of healthcare professionals has a potential in reducing the risk to self-medication during this lockdown period. Since physicians known the information about the medication it is easy for them to properly instruct the patient about the medications and to help them understand. Giving therapeutic advice to patient is very necessary as lack of therapeutic guidelines are not been mention to the people and moreover this can cause serious problem in chronic and acute conditions. If not instructed them properly it can lead to

misinformation. As a pharmacist it is also important to advise the patients who is visiting the pharmacy and should speak about the adverse effects and what precautions should be taken in order to safe guard when consuming any kind of OTC medications during the lockdown period. To evaluate the reason behind self-medication a survey was conducted to know their knowledge attitude and practice of self-medication during lockdown among the individuals living in Chennai.

MATERIALS AND METHOD:

Study site and period:

The study was conducted in a gated community in porur locality in Chennai were more than 2000 people were living in this community. The study was conducted for a span of 6 months from November 2020 to April 2021.

Study design:

The research design conducted is a cross sectional online KAP survey on self-medication during lockdown -2020.

Selection criteria:

Inclusion criteria:

- 1) Participants with age \geq 18-75years
- 2) Participants participating both male and female
- 3) Participants living at home for the past 8months
- 4) Participants willing to give consent for the survey

Exclusion criteria:

- 1) Participants with age limit less than 18years
- 2) Participants who are bedridden
- 3) Participants not willing to participate in the survey

Sample size determination and sampling technique:

A simple random sampling technique was used to select the study samples. The sample size calculated was 323.

Data collection tool and technique:

The data collected is a self-administered validated questionnaire using Google forms were sent via through google form link provided. A short description of the study, voluntary participation, declaration of confidentiality was included at the beginning. A total of 21 questions were given which included knowledge (7 questions), attitude (5 questions) and practice (9 questions).

Statistical analysis:

The data was encoded in Ms Excel. The obtained data was analysed by using the Statistical Package of Social Sciences (SPSS) version 24 to validate and analyse the entries. The data analysed where descriptive and summarised as counts and percentage depicted as tables, graphs and pie charts.

RESULTS:

Based on the given selection criteria 234 participants responded to the survey and completed the questionnaire.

Demographic details:**Age wise distribution**

Table 1 illustrates the majority of the participants were in the age group of 50-59 years of age that accounts about 29.5%

Gender distribution

Table 2 illustrates female participants (71.8%) were predominantly more in number compared to the males (28.2%) in this study

Knowledge towards self-medication:

In **K1** question self-medication was rightly defined by 134 respondents (57.5%) as the use of drugs where it does not require a doctor prescription and the drugs mentioned is not recommended by an authorised person and mainly these medicines are self-diagnosed.

K2: Source for respondents to self-medicate during the lockdown

This Depicts the source to self-medicate among the participants during the lockdown. It is noted that most of the sources were from family members (55.8%) followed by friends (40.5%) shown in **Figure 1**.

K3: Medical practice to self-medicate during the lockdown period.

The **Figure 2** depicts the medical practice which people followed to self-medicate during this lockdown period. Majority were modern medicine 119 (50.2%) followed by 82 responses for Ayurveda (35%),

K4: Reasons for self-medication during the lockdown

The **Figure 3** illustrates the reasons to self-medicate during the lockdown period were mostly due to previous illness in treating similar symptoms (47.4%) were the highest followed by mild ailment (40.6%) shown in **Figure 3**.

K5: Conditions/symptoms for self-medication among the respondents during the lockdown.

The **Table 3** illustrates that most of the participants took medication to boost their immunity (57%) followed by cold (32.1%) and headache and body pain (22.2%).

K6: Methods for using Self-medication during the lockdown.

The majority of the participants self-medicated with already stored drugs at home (34.2%) followed by remembering the names of the drugs (29.5%) are depicted in **Figure 4**.

K7: Medication used to self-medicate during lockdown-2020.

Table 4 Shows that during the lockdown period a greater number of participants had taken paracetamol (55.1%) followed by immune boosting/vitamin supplements (54.7%).

Attitude towards self-medication

The attitude among the respondents in which the highest number of positive

attitude is shown among in A2 (72.2%) followed by A5 (68%) is summarised in **Table 5**.

It is noted that P1 (55.1 %) majority of the respondents preferred self-medication

during the lockdown period. Followed by in P5 most of the people responded that they didn't develop ADR when taking any medication (97%) is summarised in **Table 6**.

Table 1: Age criteria of the respondents

Characteristics(n=234)	Frequency	Percentage
Age(years)		
>70	02	0.9%
18-19	04	1.7%
20-29	51	21.8%
30-39	38	16.2%
40-49	40	17.1%
50-59	69	29.5%
60-69	30	12.8%

Age (Mean±S.D) =43.23±14.5

Table 2: Gender details

Gender	Number of participants (%) (Total n=234)
Male	66(28.2%)
Female	168(71.8%)

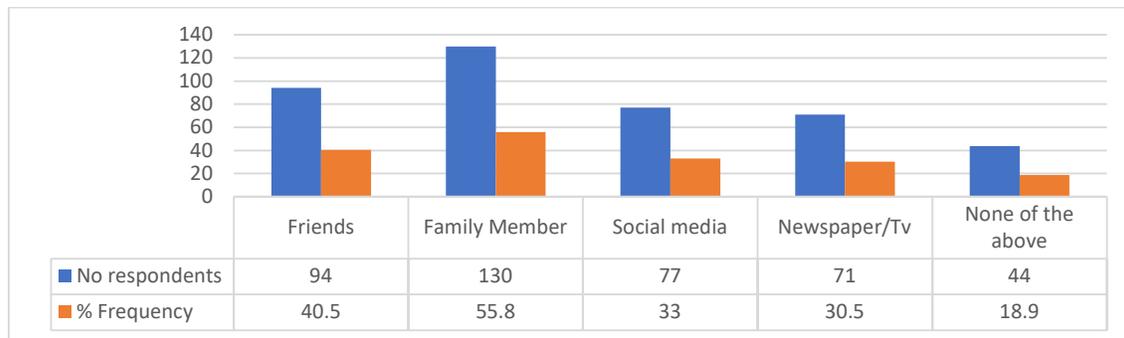


Figure1: Source of self-medication during lockdown

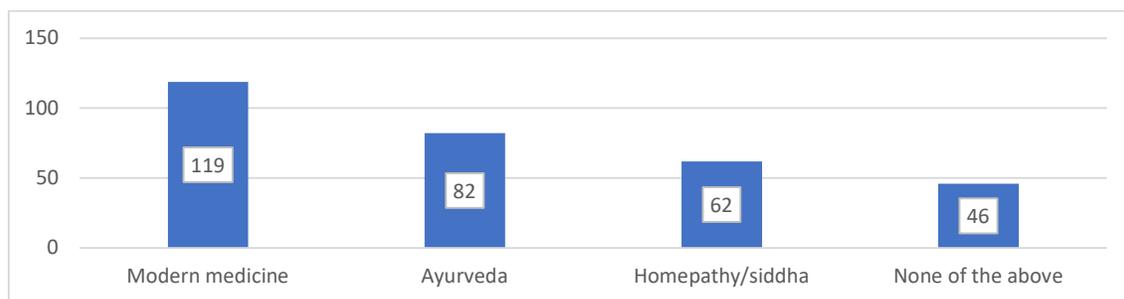


Figure 2: Medical practice to self-medicate during lockdown

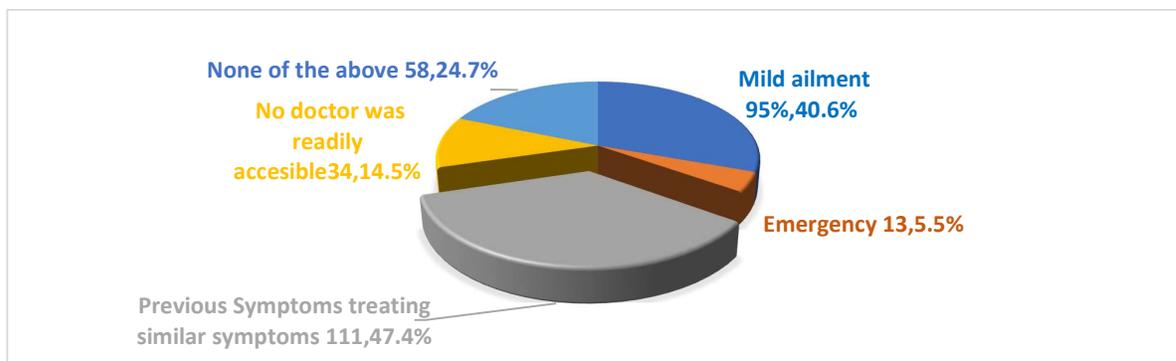


Figure 3: Reasons to self-medicate

Table 3: Percentage frequency among the participants for common symptoms to self-medicate during the lockdown

Condition/Symptoms	No of Respondents	%Frequency of respondents
Fever	30	12.8%
Cold	75	32.1%
Cough	39	16.7%
Sore throat	46	19.6%
Headache/body pain	72	22.2%
To boost immunity	133	57%
None of the above	34	14.5%

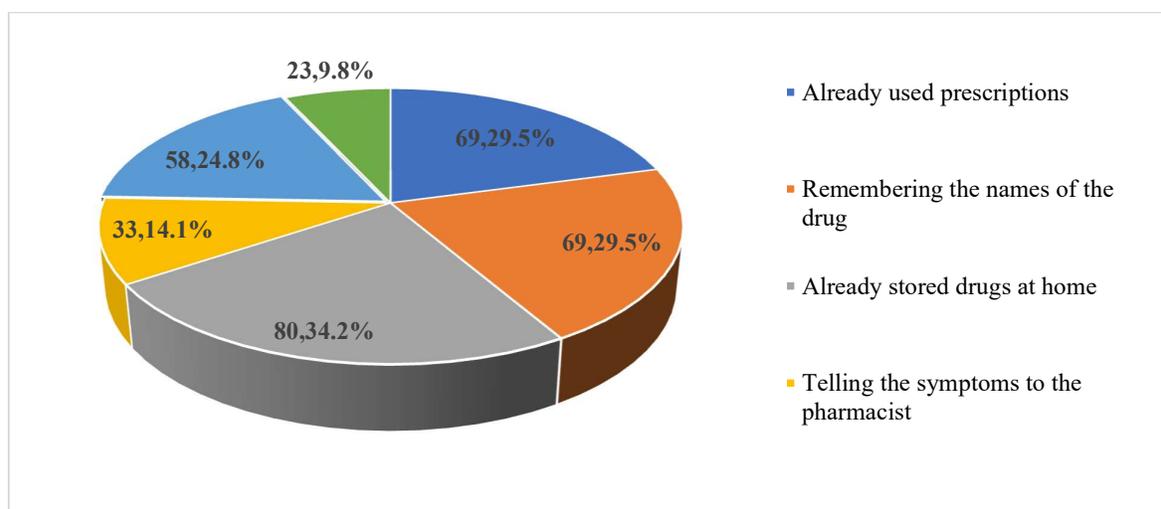


Figure 4: Methods to self-medicate

Table 4: Percentage frequency of participants of the medications used to self-medicate during lockdown

Drugs used	No of respondents	%Frequency
Paracetamol	129	55.1%
Cough syrup	41	17.5%
Antibiotics	23	9.7%
Immune boosting /Vitamin supplements	128	54.7%
Others specify(written by the participants)		
Natural remedies prepared at home which includes,Ayurvedic concoctions,herbs and spices.	8	3.4%
Kabsur kudineer	2	0.8%
Nilavembu kashyam/vethalai kashyam	1	0.4%
Siddha medicines/homeopathy	3	1.2%
Didn't take any medication	14	6%

Table 5: Attitude questionnaire

Questionnaire items	Frequency%
A1 Is it advisable to take self-medication if you had the same symptoms as you had in your previous illness	100 (42.7%)
A2 Improper self-medication could result in an increase in drug induced diseases and in wasteful public expenditure	169 (72.2%)
A3 Is it appropriate to seek a pharmacist advice when someone undergoes self-medication that he/she has never used before and after lockdown	104 (43.9%)
A4 It would be advice to others to take self-medication during the lockdown -2020	149 (63.6%)
A5 In some cases Self-medication can cause serious illness or worsen the previous illness	154 (65.8)

Figure5: Assessment of attitude response

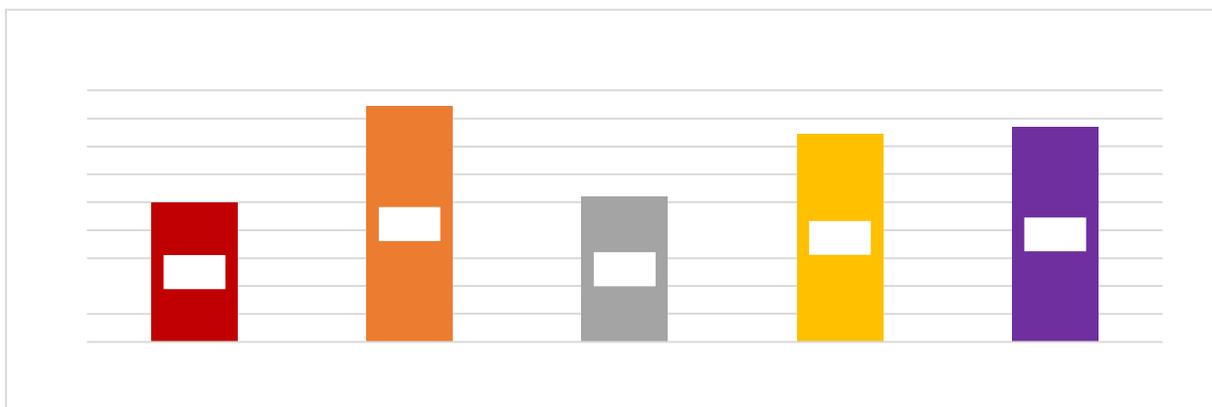


Table 6: Practice questionnaire

Questionnaire items		No of respondents	%Frequency
P1 Preferred Self-medication during the lockdown	YES	129	55.1%
	NO	105	44.8%
P2 Dependent on self-medication during the pandemic	YES	86	36.8%
	NO	148	63.2%
P3, Have you taken any drugs without prescription during the pandemic	YES	106	45.3%
	NO	128	54.7%
P4 How long have you self-medicated	2-4days	111	47.4%
	3-7days	26	11%
	>10 days	20	8.4%
	None	77	33%
P5 Have developed any ADR	YES	7	3%
	NO	227	97%
P6, Have you given your prescription to someone with the same symptoms	YES	25	10.5%
	NO	209	89.3%
P7, Do you take drugs to self-medicate for a longer period of time without medical advice	YES	10	4.2%
	NO	224	95.7%
P8, Do you have the habit of taking medications without a particular reason	YES	4	1.7%
	NO	230	98.3%
P9, Have you given any medications suggested by your family members during this pandemic	YES	51	21.5%
	NO	183	78.2%

DISCUSSION:

When analysing the data, it found that the participants had a fairly good knowledge about self-medication. Some of the residents also specified that they mostly they used methods like home remedies in treating minor illness and to boost their immunity due to the fear of COVID-19 symptoms. As there was misinformation about COVID-19 in boosting their immunity majority of them took supplements for their immunity followed by treating their symptoms for cold and headache body pain. In most of the recorded studies fever, headache, common cold where the most common conditions were the residents generally self-medicate. As self-medication is form of self-care and self-diagnosing symptoms in order to treat minor symptoms people tend to buy medicines from online or check through the internet, from friend's family etc. The medication that the residents preferred were paracetamol and immune boosting /vitamin supplements. The participants were also given to specify if they take any other medications during the pandemic and most of the responses were use of natural remedies using ayurvedic concoctions. Some of the participants took medications like Eldoper, Aceclofenac, Disulphiram, Nalitma in order to treat their symptoms. It is noted that few respondents preferred siddha and homeopathy has it is the

traditional medicine in treating COVID-19. These medications for how long they are consuming till today is still a question to be answered. The online survey also found a positive attitude among the residents when it comes to self-medication. Majority of the residents were aware for the fact that if misused any medications can lead to drug induced diseases and wasteful public expenditure. The residents were aware that they self-medication can also causes serious illness if taken for a longer period of time and worsen health conditions. It was noted that during the pandemic the residents had followed self-medication in order to treat their minor symptoms and boost their immunity. Even though practising self-medication was their choice during this pandemic they weren't dependent on these medications for a longer period of time and more over majority of the respondents didn't develop any kind of ADR.

CONCLUSION

The study had found out that the majority of the residents had preferred self-medication during the lockdown period in treating their symptoms and safe guarding themselves from others. Therefore, there is a dire need to adequately equip the populace with drug information as well as educate the public on the limits and acceptable attitudes and practices of self-medication. Even as the health authorities and pharmaceutical companies should bring

more guided safety measures during this pandemic period.

CONFLICT OF INTEREST:

There is no conflict of interest between the authors

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