
A Study on Self Medication Practices During Covid-19 Pandemic

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Abstract

Self Medication(SM) “involves the use of medicinal products by the consumer to treat self recognized disorders or symptoms, or the intermittent or continued use of a medication prescribed by a physician for chronic or recurring diseases or symptoms”. The objective of this study was to determine practices of Self Medication. The present study was conducted in the field practice areas of the Department of Community Medicine, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, from August 2021 to July 2022. It was a community based cross-sectional study. A total of 424 people was included. Simple Random Sampling was done. Individuals ≥ 18 years of age from families of RHTC and UHTC, those who experienced an episode of illness after start of Covid-19 pandemic and those who gave consent were included in the study. Patients who were bed-ridden and/or suffering from mental illness and those who did not give consent were excluded from the study. Data entry and analysis was done in IBM SPSS v 26.0. Relevant statistical tests were applied wherever required. Nearly half of the study population practised Self Medication as a form of treatment at least once in the preceding 12 months. The major source of information for the choice, dosage and duration of the medicines consumed for Self Medication in our study was found to be the pharmacist (69.0%). It was followed by prior experience (31.0%) and previous prescription (15.2%). In our study analgesics and antipyretics were found to be consumed by the highest percentage of study participants. People should be made aware of the risks of Self Medication and should be guided on responsible Self Medication. Awareness campaigns may be organised in this regard.

Key Words: Self medication, Covid 19, types of medicine

Introduction

According to WHO, Self Medication(SM) “involves the use of medicinal products by the consumer to treat self recognized disorders or symptoms, or the intermittent or continued use of a medication prescribed by a physician for chronic or recurring diseases or symptoms”. SM practises have the potential to cause antimicrobial resistance, undesirable side effects, and in certain circumstances, even death. The prevalence of SM use is estimated

to be high in India, with one metaanalysis showing the mean prevalence to be 53%⁽¹⁾. There are many advantages and disadvantages of Self Medication. The common advantages are that Self Medication is a faster and cheaper form of treatment solution⁽²⁾. The consultation cost is bypassed and consultation time is saved. In hilly, tribal and other hard to reach areas, where there might be a shortage of health work force, patients might depend upon Self Medication⁽³⁾. Self Medication reduces the work absenteeism due to

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minor symptoms⁽⁴⁾. There are many disadvantages of Self Medication. Resorting to Self Medication might mask the symptoms of chronic diseases. Thus, it might delay the diagnosis of such conditions. Some drugs may interact with other drugs. These drug interactions can lead to harmful effects on human body and have unpredictable effects on the disease. Inadequate dose of a medicine might be used. This might lead to the patient not getting relief from the ailment. For antimicrobials, it might lead to AMR. Antimicrobial Resistance (AMR) is a major challenge faced by humanity. Self Medication can cause irrational use of antimicrobials and thus can lead to AMR.

The objective of this study was to determine practices of Self Medication.

Material and Methods

The present study was conducted in the field practice areas of the Department of Community Medicine, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, from August 2021 to July 2022. It was a community based cross-sectional study. A total of 424 people was included. Simple Random Sampling was done.

Inclusion Criteria Individuals ≥ 18 years of age from families of RHTC and UHTC. Individuals

who experienced an episode of illness after start of Covid-19 pandemic. Individuals who gave consent to be a part of study.

Exclusion Criteria Individuals < 18 years of age. Individuals who do not give consent to be a part of the study. Patients who were bed-ridden and/or suffering from mental illness. Ethical clearance was obtained from Institutional Ethics Committee. Confidentiality was maintained and the participants were adequately assured of the same. Data entry and analysis was done in IBM SPSS v 26.0. Relevant statistical tests were applied wherever required.

Results

Table 1: Consumption of any medicine in last one year by the study participants (N=424)

Consumed any medicine	n (%)
Yes	400 (94.3%)
No	24 (5.7%)

Table 2: Consumption of Self Medication in last one year by the study participants (N=400)

Self Medication	n (%)
Yes	210 (52.5%)
No	190 (47.5%)

Table 3: Source of Information regarding Self Medication

Source of Information	Rural (N=117) n (%)	Urban (N=93) n (%)	Total (N=210) n (%)
Pharmacist	83 (70.9%)	62 (66.7%)	145 (69.0%)
Family, Friends and Neighbours	4 (3.4%)	6 (6.5%)	10 (4.8%)
Previous prescription	21 (17.9%)	11 (11.8%)	32 (15.2%)
Prior experience	35 (29.9%)	30 (32.3%)	65 (31.0%)
Advertisement	1 (0.9%)	0	1 (0.5%)
Others	0	1 (1.1%)	1 (0.5%)

Table 4: Type of Medicines consumed by users of Self Medication

Type of Medicine	Rural (N=117) n (%)	Urban (N=93) n (%)	Total (N=210)
Analgesic	80 (68.4%)	60 (64.5%)	140 (66.7%)
Antipyretic	70 (59.8%)	51 (54.8%)	121 (57.6%)
Antibiotic	33 (28.2%)	6 (6.5%)	39 (18.6%)
Antacid	13 (11.1%)	5 (5.4%)	18 (8.6%)

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Antiemetic	6 (5.1%)	2 (2.2%)	8 (3.8%)
Antihistamine	34 (29.1%)	30 (32.3%)	64 (30.5%)
Antidiarrhoeal	3 (2.6%)	5 (5.4%)	8 (3.8%)
Antihypertensive	5 (4.3%)	4 (4.3%)	9 (4.3%)
Antidiabetic	6 (5.1%)	5 (5.4%)	11 (5.2%)
Others	7 (6.0%)	4 (4.3%)	11 (5.2%)

Discussion

As shown in **table 1**, from a total of 424 study participants taken, 400 had suffered from an episode of illness in the past 12 months for which they required medication. Out of these 400 study participants, 210 (52.5%) used Self Medication as a form of treatment at least once in the preceding 12 months.

As shown in **table 3**, the major source of information for the choice, dosage and duration of the medicines consumed for Self Medication in our study was found to be the pharmacist (145, 69.0%). It was followed by prior experience (65, 31.0%) and previous prescription (32, 15.2%). Pharmacist was the major source of information in most of the studies (5,6,7,8,9). Another study⁽¹⁰⁾ found that the major source of information was previous prescription, while family members and friends were the major source of information in rural Meghalaya and rural Sahaswan⁽¹¹⁾ and⁽¹²⁾ respectively. A higher proportion of people from rural areas (17.9%) used previous prescription as a source of information for Self Medication, as compared to their urban counterparts (11.8%). This may be because of difficulties in repeated follow-ups in rural areas, due to accessibility or transportation issues.

Similar to our study (**table 4**), analgesics and antipyretics were found to be consumed by the highest percentage of study participants in other studies also^(10,7,13,14). Similar finding was reported in other study⁽¹⁵⁾. Another study⁽¹⁶⁾ found that analgesics were the medicine most commonly used for Self Medication. Another studies^(5,17) found the use of antibiotics to be 43.9% and 34.95% respectively. This was higher than that found in our study (18.6%). These studies were undertaken at predominantly urban places like urban areas of Kolkata and Puducherry.

Conclusion

People should be made aware of the risks of Self Medication and should be guided on responsible Self Medication. Awareness campaigns may be organised in this regard. The pharmacists should be sensitised to the risks and benefits of using non-prescription medicines in the treatment of common illnesses without the advice of a doctor. Necessary information regarding use of non-prescription medicines should be printed on the label. This may be done in the local language to ensure maximum reach.

Conflict of interest: nil **Source of Funding:** self

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