

Original Research Article

Doctors' self-prescribing behavior: an exploratory study

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ABSTRACT

Background: Self-prescribing among doctors is common. But the General Medical Council (GMC) and American Medical Council recommend that doctors should avoid prescribing for themselves, and close family members. Self-prescribing can lead to serious consequences. The present study reports the prevalence and pattern of self-prescribing among doctors working in various healthcare facilities of Kashmir Valley.

Methods: Pre-validated questionnaires were sent to 200 doctors selected by convenience sampling. Only 184 returned the completely filled questionnaires.

Results: At which 95.7% male doctors and 97.8% female doctors were self-prescribing. 100% doctors above the age of 40 years were self-prescribing. 100% post graduate students and consultants were practicing self-prescribing. 98.0% of those active as doctors for 1-5 years and 95.1% of those active for more than five years were self-prescribing. 60.7% doctors cited convenience, 40.4% time saving, 27.0% quick relief, 60.7% confidence, 14.6% low cost of treatment, and 15.7% crowd avoidance as a reason for self-prescribing. Major diseases self-treated were: headache (78.7%), respiratory symptoms (79.8%), fever (53.9%) and pain syndromes (31.5%). Major drugs used were: analgesics (80.9%), antipyretics (68.5%), antibiotics (58.4%), decongestants (49.4%) and antispasmodics (33.7%).

Conclusions: The observed prevalence of self-prescribing was very high in this study. The issue of self-prescribing is common and requires attention.

Keywords: Disease, Doctor, Drugs, Self-prescribing, Treatment

INTRODUCTION

Treating one's self, family, friends and colleagues are aspects of the practice of medicine that are not often taught or discussed.¹ Self-prescribing is widespread in medical culture, with physicians learning such practices while training as medical students.² Self-prescribing includes prescribing to self, family, relatives and close

friends. It is generally considered unwise due to the lack of objectivity. General Medical Council of England (GMC) prohibits self-care and prescribing for close relations and also states that self-care should be avoided whenever possible.³ GMC's updated guidance states, "wherever possible you must avoid prescribing for yourself or anyone with whom you have a close personal relationship."⁴ The Medical Council recognizes that there

are some situations where self-prescribing may occur but this should only occur when overall management of patient care is being monitored by an independent practitioner.³ American Medical Council Code of Ethics also suggests that physicians should generally not treat themselves or members of their immediate family.⁵ Although self-prescribing is legal in many countries yet the legislation prohibits the doctors from self-prescribing in some countries except for minor self-limiting conditions, emergency situations or chronic diseases that are being regularly monitored by their GPs.^{3,4,6} It is very difficult to identify clear boundaries that separate inappropriate self-care from more acceptable one.¹

There are few studies addressing self-prescribing by doctors.⁶ The official data on self-prescribing is scanty.⁴ The current study assesses the prevalence of self-prescribing among medical doctors and explores the predictors for this type of behaviour.

METHODS

This is a descriptive cross-sectional questionnaire based study. The study was conducted in the month of September 2019. The study population consists of registered medical practitioners working in various healthcare institutions of Kashmir. A structured questionnaire in English languages was created by reviewing relevant literature. The offline questionnaire was also converted into online survey.

The first part of the questionnaire investigated socio-demographic characteristics of the study subjects, such as age, gender, qualification, designation and years active as doctor. The second part asked questions about the self-prescribing behaviour. By convenience sampling a total of 200 doctors were given the questionnaire either by email to complete it online or by hand to return it manually. Only 184 doctors returned the completely filled questionnaires.

Inclusion criteria

- All registered medical practitioners.
- Willing to participate in the study.

Exclusion criteria

- Unregistered medical practitioners. (period)
- Medical students.
- Not willing to participate in the study

Ethical considerations

The study was approved by the Institutional Ethics Committee. To ensure confidentiality, the identity of the respondents was kept anonymous. Returning of the completed survey questionnaire by the participants was accepted as consent. Participation was voluntary, and without compensation.

Data analysis

Data were analyzed with descriptive statistics. Chi-square and linear regression tests were used to find the correlations. The analysis was done with manual calculators and SPSS v20. Correlations were tested at 95% significance level (p<0.05).

RESULTS

A total of 184 doctors returned the completely filled questionnaire. The respondents consisted of 50% (n=92) male and 50% (n=92) female doctors. 41.3% (n=76) were in the age group of 20-30 years, 45.7% (n=84) 31-40 years, 8.7% (n=16) 41-50 years, 2.2% (n=4) 51-60 years and 2.2% (n=4) above the age of 60 years. 35.9% (n=66) were junior residents, 21.2% (n=39) post-graduate scholars, 27.7% (n=51) senior residents and 15.2% (n=28) consultants. 55.4% (n=102) were active as doctors for 1-5 years and 44.6% (n=82) were active for more than 5 years (Table 1).

Table 1: Demographics of study population.

Variable	No.	%	
Gender	Male	92	50.0
	Female	92	50.0
Age	20-30 yrs	76	41.3
	31-40 yrs	84	45.7
	41-50 yrs	16	8.7
	51-60 yrs	4	2.2
	>60 yrs	4	2.2
Designation	Junior Resident	66	35.9
	Post-Graduate	39	21.2
	Senior Resident	51	27.7
	Consultant	28	15.2
Years active as doctor	1-5 yrs	102	55.4
	>5 yrs	82	44.6

Table 2: Self prescribing behavior of study population.

Do you self-prescribe	Yes		No	
	No.	%	No.	%
Males	88	95.7	4	4.3
Females	90	97.8	2	2.2
Age 20-30 yrs	74	97.4	2	2.6
Age 31-40 yrs	80	95.2	4	4.8
Age 41-50 yrs	16	100.0	0	0.0
Age 51-60 yrs	4	100.0	0	0.0
Age>60 yrs	4	100.0	0	0.0
Junior Residents	62	93.9	4	6.1
Post-graduates	39	100.0	0	0.0
Senior Residents	49	96.1	2	3.9
Consultants	28	100	0	0.0
Active as doctor for 1-5 yrs	100	98.0	2	2.0
Active as doctor for >5 yrs	78	95.1	4	4.9

At which 95.7% (n=88) male doctors, and 97.8% (n=90) females doctors were self-prescribing. Self-prescribing in doctors in the age group of 20-30 years was 97.4% (n=74), age group 31-40 years 95.2% (n=80), age group 41-50 years 100% (n=16), age group 51-60 years 100% (n=4) and above 60 years 100% (n=4). 93.9 % (n=62)

junior residents, 100% (n=39) postgraduates, 96.1% (n=49) senior residents, and 100% (n=28) consultants were self-prescribing. 98.0% (n=100) of those active as doctors for 1-5 years and 95.1% (n=78) of those active for more than five years were self-prescribing (Table 2).

Table 3: Frequency of self-prescribing in respondents.

Frequency of self-prescribing	Always		Occasionally		Rarely	
	No.	%	No.	%	No.	%
Males	14	15.9	72	81.8	2	2.3
Females	30	33.3	54	60.0	6	6.7
Age 20-30 yrs	14	18.9	56	75.7	4	5.40
Age 31-40 yrs	24	30.0	52	65.0	4	5.0
Age 41-50 yrs	2	12.5	14	87.5	0	0.0
Age 51-60 yrs	4	100.0	0	0.0	0	0.0
Age>60 yrs	0	0.0	4	100.0	0	0.0
Junior Residents	14	22.6	46	74.2	2	3.2
Post Graduates	6	15.4	33	84.6	0	0.0
Senior Residents	22	44.9	21	42.6	6	12.2
Consultants	2	7.1	26	92.9	0	0.0
Active as doctor for 1-5 yrs	24	24.0	72	72.0	4	4.0
Active as doctor for 6-10 yrs	20	25.6	57	73.1	1	1.3

15.9% (n=14) male doctors were always self-prescribing, and 2.3% (n=2) were rarely self-prescribing. 81.8% (n=72) were occasionally self-prescribing. 33.3% (n=30) female doctors were always self-prescribing, and 6.7% (n=6) were rarely self-prescribing. 60.0% (n=54) were occasionally self-prescribing. 18.9% (n=14) doctors aged 20-30 years were always self-prescribing, and 5.4% (n=4) were rarely self-prescribing. 75.7% (n=56) were occasionally self-prescribing. 30.0% (n=24) doctors aged 31-40 years were always self-prescribing, and 5.0% (n=4) were rarely self-prescribing. 65.0% (n=52) were occasionally self-prescribing. 12.5% (n=2) doctors aged 41-50 years were always self-prescribing and 87.5% (n=14) were occasionally self-prescribing. 100% (n=4) doctors aged 51-60 years were always self-prescribing. 100% (n=4) doctors above 60 years were occasionally self-prescribing. 22.6% (n=14) junior residents were always self-prescribing, and 3.2% (n=2) were rarely self-prescribing. 74.2% (n=46) were occasionally self-prescribing. 15.4% (n=6) postgraduates were always self-prescribing and 84.6% (n=33) were occasionally self-prescribing. 44.9% (n=22) senior residents were always self-prescribing and 12.2% (n=6) were rarely self-prescribing. 42.9% (n=21) were occasionally self-prescribing. 7.1% (n=2) consultants were always self-prescribing and 92.9% (n=26) were occasionally self-prescribing. 24.0% (n=24) with short service of 1-5 years were always self-prescribing, and 4.0% (n=4) were rarely self-prescribing. 72.0% (n=72) were occasionally self-prescribing. 25.6% (n=20) with service of more than 5 years were always self-prescribing, and 1.3% (n=1) were

rarely self-prescribing. 73.1% (n=57) were occasionally self-prescribing (Table 3).

60.7% (n=108) doctors cited convenience, 40.4% (n=72) time saving, 27.0% (n=48) quick relief 60.7% (n=108) confidence, 14.6% (n=26) low cost of treatment, 15.7% (n=28) crowd avoidance as a reason for self-prescribing. 9.0% (n=16) cited other reasons for the practicing self-prescribing (Table 4).

78.7% (n=140) doctors self-prescribed for headache, 79.8% (n=142) for respiratory symptoms, 31.5% (n=56) for pain syndromes 53.9% (n=96) for fever, 51.2% (n=92) for stomach aches, 56.2% (n=100) for diarrhoea, 47.2% (n=84) for nausea and vomiting, 19.1% (n=34) for insomnia, 22.5% (n=40) for menstrual symptoms, 13.5% (n=24) for ocular symptoms. 7.9% (n=14) cited various other reasons for self-prescribing (Table 5).

Table 4: Reasons for self-prescribing.

Reason	Yes		No	
	No.	%	No.	%
Convenience	108	60.7	70	39.3
Time Saving	72	40.4	106	59.6
Quick Relief	48	27.0	130	73.0
Confidence	108	60.7	70	39.3
Economical	26	14.6	152	85.4
Crowd avoidance	28	15.7	150	84.3
Others	16	9.0	162	91.0

Table 5: Indications for self-prescribing.

Indications	Yes		No	
	No.	%	No.	%
Headache	140	78.7	38	21.3
Cough/Cold/sore throat	142	79.8	36	20.2
Pain Syndromes	56	31.5	122	68.5
Fever	96	53.9	82	46.1
Stomachache	92	51.7	86	48.3
Diarrhea	100	56.2	78	43.8
Nausea Vomiting	84	47.2	94	52.8
Insomnia	34	19.1	144	80.9
Menstrual symptoms	40	22.5	138	77.5
Ocular symptoms	24	13.5	154	86.5
Others	14	7.9	164	92.1

Table 6: Self-prescribed Drugs.

Self-prescribed Drugs	Yes		No	
	No.	%	No.	%
Analgesics	144	80.9	34	19.1
Antipyretics	122	68.5	56	31.5
Lozenges	42	23.6	136	76.4
Multivitamins	70	39.3	108	60.7
Decongestants	88	49.4	90	50.6
Antibiotics	104	58.4	74	41.6
Antispasmodics	60	33.7	118	66.3
Anxiolytics	32	18.0	146	82.0
Others	10	5.6	168	94.4

DISCUSSION

There are several important findings in our study. The prevalence of self-prescribing was slightly higher in female doctors as compared to male doctors. As compared to young doctors the prevalence of self-prescribing was higher in older and elderly. The prevalence of self-prescribing was higher among post-graduate scholars and consultants as compared to junior and senior residents. The doctors with shorter service had slightly higher prevalence of self-prescribing. All the observed differences in self-prescribing were statistically insignificant ($p>0.05$). Very low correlation was found between self-prescribing and: age ($r=-0.003$), gender ($r=0.061$), designation ($r=-0.059$), length of service ($r=0.079$). The most common reasons for self-prescribing were convenience, confidence and time saving. The most common diseases for which self-prescription was done were respiratory symptoms, headache, GI symptoms and pain syndromes. The drugs most commonly self-prescribed were analgesics, antipyretics, antibiotics, decongestants, multivitamins and antispasmodics.

Ruth also found that most practitioners manage their own healthcare by self-prescribing.⁷ It has been reported that convenience, confidence, confidentiality and cost are most often cited as the reason for self-prescribing.⁸

In some surveys, the diseases for which self-prescription was done were pain, mental disorders, insomnia, GI symptoms.⁹

A survey conducted in Norway found that 90% doctors practiced self-prescribing. No difference in self-prescribing behaviour were found between males and females. The most frequently self-prescribed drugs were antibiotics, contraceptives, analgesics and hypnotics.¹⁰

Montgomery et.al while reviewing self-treatment behaviour found that the mean number of physicians reporting self-prescription was 61% (range of 9-99 %).²

The validity of our findings relies primarily on the accuracy of responses. We tried to minimize recall bias by using a well-structured pre-validated questionnaire. Another limitation of this study is the limited sample size. The design of the study does not ensure that the study population is representative of medical fraternity as a whole. Though the relatively high level of self-prescribing in our study concurs with the findings in other studies, however the direct comparisons are difficult. The present study is only exploratory in nature. There is a need to conduct large scale studies to reach a definitive conclusion.

CONCLUSION

Self-prescribing raises a number of ethical, emotional, and competency issues and may impair judgment about the diagnosis or treatment. The present study found that self-prescribing is very common among doctors. Strategies are needed to challenge the culture of self-prescribing. Educational programs on self-prescribing should be developed for medical students as well as practitioners.

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