

A study to select the most unethical variables by medical students in Goa

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ABSTRACT

The Medical profession is getting to be more and more like any other business profession. This stems from the fact that medical students have to pay a lot of money as fess, especially if the college is not aided by the Government. In an attempt to recover the money spent on education, young doctors tend to indulge in malpractices which result in not practicing the ethics and values of the noble profession. Inorder to find out from the medical students what they consider as most unethical and least unethical, I asked a sample of them to rank five variables in terms of most unethical to least unethical. The five variables were costly drugs, sponsorships, gifts, Government doctors doing private practice and overprescribing. The Thurstone Case V scaling technique was used to find out which variable was most unethical and which was least unethical. Of the five accepting gifts was considered as most unethical, because a gift can range from a simple innocent pen to an expensive car in certain cases. The second variable to be ranked as most unethical was overprescribing which is detrimental to a patient in terms of monetary cost and also in terms of adverse or side effects on account of consuming too many drugs. The Chi square technique was also used wherein the Null hypothesis stated that there was no statistical difference in considering prescribing expensive drugs as most unethical or least unethical. Of the students who say overprescribing was unethical, the number of students in that who consider the prescription of costly drugs as most unethical was nil and less unethical was 100%. The Null hypothesis wais thereby false and it proved that a statistical difference existed in terms of ethics while prescribing costly drugs.

Key words: Unethical, overprescribing, sponsorships, gifts, private practice

1.Literature Review

The Literature review was conducted to learn as to how doctors, especially medical students saw costly drugs, sponsorships and gifts. As per Ljungberg, Lindblad, and Tully (2007), they found that cost plays an important role while prescribing. The method used was the interview pattern wherein 15 doctors of hospitals across specializations were interviewed. In the case of Allan, Lexchin and Wiebe (2007), they found that doctors were ignorant about the cost of drugs and would overestimate cheap drugs and underestimate expensive drugs. This called for education of doctors regarding drug costs and also easier accessibility to costs by the doctors so that they are aware of the cost of drugs.

In contrast a study conducted by Walzak, Swindells and Bhardwaj(1994) felt that rapidly inflating health care costs limit patient care, and prescription drug costs constitute a major component of this expenditure. They conducted a study on attitudes and knowledge of prescription drug costs of primary care physicians. A questionnaire survey was sent to 137 internists, family, and general practitioners, randomly selected from a list provided by the Ohio State Medical Board. According to Walzak et al, "Responding physicians indicated consideration of drug costs in therapeutic decisions, but lacked information and often made inaccurate assumptions about costs of drugs prescribed. Most felt they could provide better service and reduce costs if information about drug prices was available".(pg 1159-1163) Turning to promotion by giving gifts to doctors, Ingole and and Yegnanarayan (2011) who studied the attitudes of medical students towards the promotion by pharmaceutical companies found that about 70% students thought that physicians should be compensated with gifts by medical representatives whenever their drugs are prescribed. 53 medical students were given the questionnaire containing 18 questions. And finally with respect to sponsorships to seminars, according to Ghosh, K.R. and Ghosh , M.S. (2010), Drug promotions and marketing initiatives by pharmaceutical companies have a substantial impact on the prescribing pattern of physicians in terms of non rational prescribing, increasing costs of prescribing, preference for a brand name, prompt prescribing of new drugs, and decreased prescribing of generic drugs. The different ways of drug promotions include sponsoring continuous medical education programmes (CMEs), and conferences. In yet another study done on PCR's by Malhotra, Kondal, Shafiq, Sidhu and Pandi (2004), they found that 19.2% of physicians were influenced by sponsorship for conferences. The study was conducted on 96 PCRs of 25 pharmaceutical companies

2. Main text: a) Introduction

Doctors indulging in unethical practices was considered taboo early. Infact a doctor was considered almost to be like a God. In many villages doctors are still revered and considered to be magicians or demi-gods. There have been instances where in a doctor has brought back a person to life, when he was almost considered to be dead. In reality today, one finds doctors misusing their powers to a large extent. The healer of the sick is not really doing justice to his profession. Thinking it to be interesting as to how a student of medicine looks at his /her profession in terms of ethical practices, the study was conducted . Five general aspects were considered, namely, overprescribing, sponsorships, gifts, government doctors indulging in private practice and prescribing expensive drugs. Abortions and the like were not considered because then it dwells with a particular specialization, and does not conform to general issues.

These aspects were taken into consideration because many a time;

- 1) Doctors may overprescribe. It is not rare to see a doctor prescribing unnecessary drugs in order to cover up the cost of any favour that the manufacturing company may have done to the doctor. Prescriptions have been found with even 3 vitamin B complex brands , when only one would suffice. Apart from being costly to the patient, it may also be undesirable in terms of side effects or adverse effects.
- 2) Sponsorships is also considered because many a time doctors are given sponsorships to attend conferences, along with accommodation, registration and a car to travel . This results in a doctor then feeling obliged to pay back to the manufacturing company.
- 3) Gifts are an important aspect of many companies. They indulge in gifting doctors not only small gifts like a dinner set or clock to expensive gifts ranging from cars, AC's and televisions. All this costs money, and to pay back the doctor will prescribe the brand of the company who has gifted him.
- 4) Government doctors indulging in private practice is something which goes on unabated. Doctors are even known not to attend to a patient in an official practice only to see the patient in his private practice and extract money from him. Many doctors in government practice have even private hospitals run under the name of their relatives or friends .
- 5) Prescribing expensive drugs is by nature not the attitude of most doctors , but if a doctor prescribes costly drugs when cheaper brands are available then he/she is surely indulging in unethical practices. Doctors at times go by company image, and if the company has a good image then the doctor may think of prescribing brands of that company . Reputed companies usually have expensive brands.

The medical students were made to rank the following five criteria with 5 – least unethical to 1 – very unethical . Around 100 medical students were selected for the study .

Importance of the study

The study is important because it helps us to understand what a doctors considers as ethical and unethical.

Statement of the problem

Today's generation of doctors are indulging in various unethical practices which are a cause of concern. They are not doing service to the sick in the true sense in many cases.

Objectives

1. To find out what a doctor considers most unethical
2. To find out what a doctor considers least unethical.
3. To find out if a statistical significance exists between ethics while prescribing costly drugs.

3. Methods

The chi square hypothesis was made use of in analyzing whether with those doctors who consider overprescribing as unethical, if in those doctors the number of doctors who consider prescription of costly drugs as more unethical or not were statistically significant. The Null hypothesis states that no relation exists between two variables A & B. (Of the students who say overprescribing was unethical(ie it lies in 1,2 or 3), which is 75% , the number of students in that who consider the prescription of costly drugs as more unethical was nil and less unethical was 100% .

Formula: $\chi^2 = \frac{\sum \frac{(f_1 - F_1)^2}{F_1}}{50}$

A
B

Where A & B are the variables, f_1 is the observed frequency, F_1 is the theoretical frequency, and $\frac{(f_1 - F_1)^2}{F_1}$ is the final result. The final result of both A and B are added together to arrive at the calculated chi sq value. If the calculated chi sq is less than the tabular chi sq at (k-1) degrees of freedom where K stands for number of variables and at 95% confidence level, then the null hypothesis is said to be true. If the tabular chi sq is 3.68, then the Null hypothesis is

false and a statistical difference exists in terms of ethics while prescribing costly drugs. That is most doctors feel that prescribing costly drugs is less unethical.

Thurstone Case V Scaling was also used whereby the 5 variables are compared with one another. These values are then divided by the sample size and the fractions are then read on a table. The lowest value is then added or subtracted to itself to make the lowest value zero and this value is added to the other variables. The resulting values are plotted on a one dimensional scale.

4. Research Methodology

A random, direct, structured questionnaire was utilized wherein a personal interview was conducted on 100 medical students of Goa. The research design was of an exploratory design.

5. Results

1. If A-Costly drugs, B –Sponsorships, C- Gifts, D- Government doctors practicing and E-Overprescribing, We get a unidimensional scale with D at the bottom followed by A, B, E and C.
2. If the calculated chi sq is less than the tabular chi sq at (k-1) degrees of freedom where K stands for number of variables and at 95% confidence level, then the null hypothesis is said to be true. As the tabular chi sq is 3.68, and the calculated chi square is 100, the Null hypothesis is false and a statistical difference exists in terms of ethics while prescribing costly drugs. That is most doctors feel that prescribing costly drugs is less unethical.

Discussion

- a) The study was conducted on only 100 medical students Goa
- b) Bias may have been present in answering the questions on account of not wishing to disclose information.

6. Conclusion

1. The conclusions which can be drawn are that Government doctors practicing is considered the least unethical, perhaps because they feel that if a patient comes to your door you should not refuse him treatment. Prescribing costly drugs is also considered relatively unethical, especially if the drug is going to benefit the patient. Sponsorships are considered part and parcel of life and hence it is ranked third in importance. Overprescribing is ranked second because the students feel that it is exploitation of the patient. Finally gifts is ranked 1 because the students feel that gifts could range from costing a lot of money to not so much. However a gift is a gift and can be associated with a bribe. As a result it is ranked the most unethical.
2. A statistical difference exists between ethics while prescribing costly drugs. That is most doctors consider prescribing costly drugs as less unethical.

f) Recommendations

A year later a study can once again be undertaken and the unethical factors could be checked for any change.

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6.Tables:

1.The Thurstone Case V Scaling was used to analyze the data. The comparison between the variables was first made wherein the variables A, B,C, D, and E were compared with each other. A-costly drugs, B –sponsorships, C- Gifts, D- Government doctors practicing and E-Overprescribing.

1 represents most unethical and 5 least unethical

Table 1

	A	B	C	D	E
A	0.5	90/100	90/100	15/100	75/100
B	10/100	0.5	90/100	25/100	70/100
C	10/100	10/100	0.5	15/100	65/100
D	85/100	75/100	85/100	0.5	70/100
E	25/100	30/100	35/100	30/100	0.5

Converting to decimals, we get

Table 2

	A	B	C	D	E
A	0.5	0.9	0.9	0.15	0.75
B	0.1	0.5	0.9	0.25	0.7
C	0.1	0.1	0.5	0.15	0.65
D	0.85	0.75	0.85	0.5	0.7
E	0.25	0.3	0.35	0.3	0.5

Finding the values from the Thurstone Case V scaling table, we get

Table 3

	A	B	C	D	E
A	0	1.28	1.28	-1.04	0.68
B	-1.28	0	1.28	-0.67	0.53
C	-1.28	-1.28	0	-1.04	0.39
D	1.04	0.65	1.04	0	0.53
E	-0.68	-0.53	-0.39	-0.53	0

Adding the values of each variable we get

Table 4

	A	B	C	D	E
	-2.2	-0.15	3.21	-3.28	2.13

Adding the least value which is 3.28 to all the variables we get

Table 5

A	B	C	D	E
1.08	3.13	6.49	0	5.41

If A-costly drugs, B –sponsorships, C- Gifts, D- Govt doctors practicing and E-Overprescribing, We get a unidimensional scale with D at the bottom followed by A, B, E and C.

2. Chi square test:

Formula	f1	F1	(f1-F1)	(f1-F1) ² /50
A	0	50	-50	50
B	100	50	50	50
				100

Where A & B are the variables, f1 is the observed frequency, F1 is the theoretical frequency, and (f1-F1)²/50 is the final result