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HOW CODE OF ETHICS INFLUENCES THE ETHICAL BEHAVIOR OF MEDICAL REPRESENTATIVES' IN THE PHARMACEUTICAL INDUSTRY?

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ABSTRACT

Medical representatives bear the blunt of the significant pressure from the peers and managers to accomplish their market targets which call for an aggressive promotion. This inevitably leads to unethical practices by medical representatives in the sales field. Study of ethic codes influence on ethical behavior of medical representatives in the profession is an under-portrayed component which deserves further perusal. The purpose of the study is to find out the existence of ethic codes and its influence on ethical behavior of medical representatives in the promotion of pharmaceutical products. It is categorized as a cross-sectional and correlational study. Results conclude that code of ethics exists in multinational companies. Ethical behavior of multinational pharmaceutical company medical representatives has significant difference compare to domestic company medical representatives. Chi-square test shows that there is a strong association between code of ethics and training on ethics. Multinational pharmaceutical companies are recommended to follow the strict guidelines (followed in developed countries) and not take the advantage of poor regulation, callous competition and colossal corruption system in relation to promotion of pharmaceutical products to doctors and direct to consumers that exists in India.

Key Words: *Code Of Ethics, Ethical Eehavior, Medical Representative, Pharmaceutical Industry.*

INTRODUCTION

In the last 20 years, the practice of establishing code of ethics in the pharmaceutical industry has increased enormously. The growth in adopting this code of ethics started in early 70's especially in many multinational pharmaceutical companies. Code of ethics is a written, distinct and formal document which consists of moral standards used to guide employee or corporate behavior (Schwartz M, 2001). In this study, code of ethics related to guidelines and regulation of professional bodies in the promotion of pharmaceutical products to doctors. The purpose of these ethic codes is to set out specific guidelines and standards to direct appropriate ethical behavior in the company for their medical representatives (Crane and Matten D, 2004). Studies reveal that ethic codes express the organization's desire to prevent questionable conduct and to recompense moral actions (Tucker et al, 1999). In addition, code of ethics guide actions to be taken, and also offer guidelines for making decisions about those actions. Code of ethics and code of conduct will help medical representatives in taking the decisions in frequent ethical dilemmas in the pharmaceutical sales. Medical representatives in pharmaceutical companies with formalized ethic codes believe that their employers and top level management have a greater commitment and responsibility to ethical behavior that they will reward (punish) ethical (unethical) behavior (Schwartz M, 2001).

Research Article

Ethics code is a way in which organizations attempt to influence their medical representatives' ethical behavior and it shows that an organization is concerned about moral obligations and wants to present an ethical orientation (Wortuba T R et al, 2001). Ethic codes describe broad company policies that guide ethical reasoning, as well as rule of thumb that affect ethical behavior of medical representatives in specific circumstances in the sales field (Farrell H and Farrell B, 1998; Ferrell and Fraedrich, 1991). Mere existence of a code of ethics cannot influence ethical behavior of medical representatives. The content and specificity of the ethics code, the degree to which it is successfully communicated to employees, the method and medium used to communicate and the development of effective rewards/punishments for compliance or non-compliance are the significant factors which make the code of ethics more or less effective (Schwartz M, 2001). However, because ethics code represents a formalization of organizations' concern with ethical behavior, the researchers expect the existence of ethic codes in organizations to have a positive impact on medical representatives' perceptions of the moral/ethical context in which they work. The existence of an ethics code may show employees that ethical actions are encouraged, increasing their overall assessment of ethical conduct in their companies (Adams J S et al, 2001; Sean Valentine and Tim Barnett, 2002).

Since ethic codes are utilized in an attempt to develop an ethical context (Cassell C et al, 1997; Hunt S D et al, 1989), there is reason to believe that the presence of codes may strengthen employees' perceptions of an organization's ethical values and practices. When companies write codes specifying moral behavior, it would logically follow that their presence would improve employees' beliefs about the company's dedication to supporting ethical actions, reprimanding unethical behavior, and developing an ethical organizational context (Sims R R, 1992). Ethical perceptions are particularly important because previous research indicates that they also affect ethical reasoning (Singhapakdi A, 1999; Trevino L K et al, 1998). Sales managers and medical representatives work in an occupation that has a relatively poor reputation for ethical behavior¹⁴. Two relevant questions regarding ethics codes are "Do ethic codes influence the ethical behavior of medical representatives?" and if so, "How and why do they influence medical representatives' ethical behavior?" Numerous studies have addressed the first question, with mixed results (Schwartz M, 2001) and there is a need to study this in the pharmaceutical industry as it is considered to be a high risk industry.

Since there is an enormous competition in the pharmaceutical industry, this situation calls for aggressive promotions. This inevitably leads to unethical practices and behavior of involved personnel. Many scholars view that the creation of code of ethics in a company is an important element to enhance ethical conduct among its employees (Adams J S et al, 2001; Wortuba T R et al, 2001). Further the code of ethics expresses the organization's pursuit to curb questionable conduct (Sean Valentine and Tim Barnett, 2002). Wortuba (1990) concluded that sales managers and sales representatives work in an occupation that has a relatively poor reputation for exhibiting a consistent ethical behavior in their practice. Schwartz (2001) notably re-emphasized that implementation of ethic codes by companies may not influence the ethical behavior of its employees or that its influence is questionable. As these studies provide mixed result on influence of ethics code on ethical behavior, the purpose of this study is to find out influence of existence of ethic codes on ethical behavior of medical representatives in the pharmaceutical industry. In addition, it is imperative to find out the influence on gender and the type of company (domestic or multinational) that medical representatives are working for.

MATERIALS AND METHODS

It is a quantitative study and the researcher collected the data from medical representatives using simple random and cluster sampling through a structured questionnaire (n=300). It is a correlation and a cross sectional study conducted under non-contrived setting (Sekaran U, 2003). The scope of this research focuses on promotion of pharmaceutical products related to allopathic formulations. Medical representatives working for domestic and multinational pharmaceutical companies with at least a year of experience were selected as study population. The questionnaire consisted of four demographic

Research Article

description items of respondents. There were 12 items on ethical behavior and eight items on code of ethics with a five point Likert scale from strongly disagree (one) to strongly agree (five). In this study, ethical behavior of medical representatives means engaging in a behavior not conforming to social moral standards or industrial norms.

Ethical behavior of medical representatives is measured by using the items related to guidelines and regulations of professional bodies. The ethical behavior and ethics code scales were tested for their reliability and validity by conducting a pilot study using 30 medical representatives.

The population for the study consists of medical representatives working for domestic and multinational companies in Karnataka State, India. Data is gathered through personal visits using structured questionnaire which consisted of 4 items on demographic description and 20 items on code of ethics and ethical behavior.

In this study, content validity of the instruments is carried out through a Delphi technique by interviewing the senior medical representatives, first line managers and some regional managers working in both domestic and multinational pharmaceutical companies in Bangalore, Karnataka, India. In addition to this, a pilot study (consisted of 30 medical representatives) was also carried out to validate the instruments used in the present study.

There are many Indian based pharmaceutical companies which are marketing or exporting their products to other countries, and these pharmaceutical companies are considered as multinational companies in this study. In addition, domestic pharmaceutical companies' means, companies which are marketing their products only in India.

RESULTS AND DISCUSSION

Among 300 medical representatives, 213 (71%) are males and 87 (29.0%) are females. Similarly, 71% (214) are working for domestic pharmaceutical companies whereas 29% (86) medical representatives are working for multinational pharmaceutical companies.

The code of ethics and ethical behavior survey instruments is measured for the reliability test which consisted of 8 and 12 items respectively. The item "management instructs to use ethics codes in the sales field" shows a squared multiple correlations of 0.352 and "company has policies with regard to ethical behavior" item shows 0.934 in the code of ethics scale. The item "sponsoring costly books to resident doctors to increase their knowledge" shows a squared multiple correlations of 0.398 and "sales promotion that uses deception and or manipulation should be avoided" item show 0.810 in the ethical behavior scale. Maximum scale mean if item deleted is 20.706 for code of ethics scale and 33.513 for ethical behavior scale. The average Cronbach's Alpha value for the code of ethics scale is 0.931 and for ethical behavior scale is 0.916. As suggested by many researchers a Cronbach's Alpha value of more than 0.70 indicates that the instrument has the internal consistency reliability (Page C and Meyer D, 2000; Sekaran U, 2003).

Table 1: Normality Statistics of Dependent and Independent Variables

Variables	Mean	Std. Deviation	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Code of ethics	22.867	7.244	-0.049	0.141	-1.139	0.281
Ethical behavior	36.387	9.241	-0.129	0.141	-1.126	0.281

Mean for code of ethics scale is 22.867 with a standard deviation of 7.244 and mean for ethical behavior scale is 36.387 with a standard deviation of 9.241 which indicates consistency in respondents' response. Normality tests were carried out for code of ethics and ethical behavior scales. Cases of Univariate outliers in the dataset were checked using the z-score and found all values were within the data set. In the table 1, all z values of skewness and kurtosis are within the range of -2.58 to +2.58. However, the maximum kurtosis is shown by code of ethics (-1.139) followed by ethical behavior (-1.126). This need

Research Article

not be transformed to natural log as it is close to standard one. Only abnormal skewness of two or three needs transformation (Bajgier S M and Lewis T, 1991; Barnett V and Lewis T, 1996). Thus, it is evident that all the items have relatively normally distribution.

In this study, missing values were minimal as it only involved ticking the suitable answers by the medical representatives. In addition, the sample consisted of only 300 medical representatives. However, studies on statistics recommended that all missing values can be replaced with the mean values (Tabachnick A, 1993).

Table 2: Association between Ethical Behavior and Code of Ethics

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1681.069	350	0.000
Likelihood Ratio	1009.726	350	1.000
Linear-by-Linear Association	152.654	1	0.000
Symmetric Measures			
		Value	Approx. Sig.
Phi		2.367	0.000
Cramer's V		0.633	0.000

The Chi-Square test result for the association between code of ethics and ethical behavior of medical representatives shows that the significance level is less than 0.005. The above results indicated that code of ethics is positively related to the ethical behavior of medical representatives. In addition, Cramer's V results shows 63.3% as their strength and this indicated that there is significant strength of association between the code of ethics and ethical behavior of medical representatives. As, Code of ethics of an organization is written, a distinct and formal document that consists of moral standards used to guide medical representatives, fundamentally serve or try to positively influence ethical decision making during ethical dilemma (Singhapakdi A, 1993; Sean Valentine and Tim Barnett, 2002).

Table 3 Male Vs Female Opinion on Dependent and Independent Variables

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Code of ethics	Male	213	22.615	7.475	0.512
	Female	87	23.506	6.685	0.717
Ethical behavior	Male	213	35.685	9.614	0.659
	Female	87	38.103	8.055	0.864

The average ethical behavior for male is 35.685 while female is 38.103, which specify that the female medical representatives in the sales force behave fairly ethical compared to male medical representatives. Studies reveal that females are fairly ethical compared to male counterparts with regard to promotion of unsafe products to doctors, accepting favors from the doctors for the special treatment or in the case of ethical reasoning (Beu D S et al, 2003; Tang T L P et al, 2008). Females believed that sponsoring costly books to the residents to improve knowledge and financial benefits offered to medical fraternity is not ethical. The average mean for code of ethics in the male category is 22.615 and for female is 23.505 which indicate that there is no difference between them. It means they are aware that code of ethics are communicated, companies are having policies with regard to ethical behavior. The sample size is not equally distributed. Out of the 300 medical representatives, there were 213 males and only 87 females. The means in the above table are not equal for ethical behavior and code of ethics but they are significantly different, which means male and female have different opinions on ethical behavior and code of ethics. Studies proved that females are fairly ethical than males (Nagashekhara M and Syed Omar

Research Article

S A, 2012). They Maintain confidentiality and anonymity in professional relationship and disclose information regarding all substantial risks associated with their drug/product or service usage.

Table 4 Mean Differences between Male and Female Respondents

Variables	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Diff.	95% Confidence Interval of the Difference	
								Lower	Upper
Code of ethics	3.656	0.057	-0.977	298	0.330	-0.900	0.922	-2.714	0.914
Ethical behavior	14.111	0.000	-2.068	298	0.040	-2.418	1.169	-4.719	-0.117

Moreover, they are aware that research integrity should be maintained by avoiding the misrepresentation and omission of pertinent research data on their products while promoting their drugs/products to physicians.

Table 5 Opinion of Domestic Vs Multinational Company Respondents

	Company type	N	Mean	Std. Deviation	Std. Error Mean
Code of ethics	Domestic	214	20.449	6.791	0.464
	Multinational	86	28.907	4.236	0.457
Ethical behavior	Domestic	214	33.164	8.558	0.585
	Multinational	86	44.407	5.063	0.546

Code of ethics mean score for medical representatives working in multinational pharmaceutical companies is 28.907, and for medical representatives working in domestic pharmaceutical companies is 20.449. This evidently indicates that existence of code of ethics in the multinational pharmaceutical companies. Studies reveal that many domestic pharmaceutical companies do not have code of ethics on promotion of pharmaceutical products. Though some companies have, these ethic codes are not distributed and communicated properly to the lower level management especially to medical representatives. Senior management is also not serious in instructing these codes in the sales field. It is doubtful that these companies have ethics committee to do ethics audits regularly in the sales field. In addition, these small scale domestic pharmaceutical companies follow their own guidelines in the promotion of pharmaceutical products to doctors including direct to consumers promotions. Whereas many large-scale domestic and multinational pharmaceutical companies follow the codes of professional bodies like IDMA (Indian Drug Manufacturers Association), OPPI (Organization of Pharmaceutical Producers of India) or IFPMA (International Federation of Pharmaceutical Manufacturers Association).

Ethical behavior mean score for medical representatives working in multinational pharmaceutical companies is 44.407 with a standard deviation of 5.063 and 33.164 for medical representatives working in domestic pharmaceutical companies with a standard deviation of 8.558 which indicated multinational company medical representatives are more ethical compared to domestic company medical representatives. Exposure to code of ethics and proper ethics training (during medical representatives induction programs or capsule training) by multinational companies have led to better perception on code of ethics and helped medical representatives to develop ethical decisions during ethical dilemmas in the promotion of pharmaceutical products. In domestic companies however, lack of ethics code and discretionary ethics training is resulted in taking their own decisions during ethical dilemmas. Those

Research Article

decisions will be absolutely for their personal or company’ benefit and hence end up in unethical practices (Dubinsky A J et al, 1992).

Table 6 Domestic Vs Multinational Company Respondents

	Levene's Test for Equality of Variances	F	Sig.	T	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	Lower	Upper
Code of ethics	48.467	0.000	-	10.718	298	0.000	-8.435	0.787	-9.984	-6.886	
Ethical behavior	36.346	0.000	-	11.401	298	0.000	-11.243	0.986	-13.184	-9.303	

Code of ethics and ethical behavior in the multinational pharmaceutical companies had significant difference when compared to domestic pharmaceutical companies. Among the two variables, the mean difference for ethical behavior is high (11.401) which indicates that, additional attention by some small scale domestic pharmaceutical companies is needed to adopt and adapt to the standards and guidelines of professional bodies like IFPMA, IDMA, or OPPI. In addition to this, the top-level managers should be role models in following ethical principles in the promotion of pharmaceutical products (Nagashekhara M and Ravindran Ramasamy, 2012; Nagashekhara M and Syed Omar S A, 2012). Exposure by multinational companies to code of ethics on promotion of pharmaceutical products leads to better perception of codes and will lead to taking the acceptable decisions within acceptable boundaries during ethical dilemmas. In domestic companies however, the boundaries may conform to their own beliefs, which result in unethical practices. Hence, it is strongly recommended that a pharmaceutical company should have codes for the promotion of pharmaceutical products to help the medical representatives to take right decisions during ethical dilemmas in the sales field. Those ethical codes should be distributed and communicated effectively by conducting ethics training. An ethics committee is also mandatory to conduct ethical audits in the sales field. In addition, some studies conclude that when a sales people could trust the organization and their managers being ethical, it reduces a feeling of vulnerability and enhances the job and personal satisfaction (Chonko L B, 2002).

Table 7: Domestic Vs Multinational Company Respondents - ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4364.895	1	4364.895	114.868	0.000
Within Groups	11323.772	298	37.999		
Total	15688.667	299			

The results proved that to measure the existence of code of ethics and ethical behavior of medical representatives based on the type of company fits well in the multivariate model with an F value of 114.868 and is significant at $p < 0.005$.

RECOMMENDATIONS

We all know now ethics codes describe broad company policies that guide ethical reasoning, hence, the existence of these codes in the pharmaceutical companies will influence the medical representatives to take correct and ethical decisions. In addition, the presence of ethics codes shows that the pharmaceutical company is concerned about moral obligations and wants to present an ethical orientation; and these codes of ethics will play a vital role when medical representatives are facing ethical dilemmas in the sales

Research Article

field (Wortuba T R et al, 2001). Hence, the researcher strongly recommends that small-scale domestic pharmaceutical companies required following the promotion of pharmaceutical products guidelines of IDMA or OPPI or IFPMA. However, mere existence of code of ethics may not positively influence the medical representative's perception about the ethical values of the organization. Hence, the content and specifications of the ethics codes, the degree to which it is successfully communicated to all the medical representatives in the company is very important factors to consider (Schwartz M, 2001). Besides that, development of effective and exclusive rewards/punishments for compliance and non-compliance is a crucial factor to be considered by medium- and large-scale pharmaceutical companies to make the ethics codes more effective. However, multinational pharmaceutical companies are also advised to follow the strict guidelines (followed in developed countries) and not take the advantage of poor regulation, callous competition and colossal corruption system in relation to promotion of pharmaceutical products to doctors and direct to consumers that exists in India.

LIMITATIONS

In this study, code of ethics and ethical behavior of medical representatives is limited to the context of promotion of pharmaceutical products/drugs to the doctors only. It is a cross-sectional study, so data limits the type of inferences. The future researchers suggested adopting a longitudinal study to track the ethical behavior of respondents. This is to find out the difference in behavior of medical representatives at the initial stage and after some years of experience in the sales field. It is noted that initially medical representatives follow the standards and guidelines of the company and later because of many organizational and external variables such as sales targets, pressure from their managers, competition and the self development make them to not to follow ethics codes laid by the company. This study was carried out among the medical representatives of pharmaceutical companies based in Karnataka state only and hence results cannot be considered as being the same for the entire pharmaceutical industry in India. Some pharmaceutical companies are hiring the medical representatives on commission basis; such medical representatives are not included in this study. In addition, medical representatives who are promoting Ayurvedic, Homeopathy and Unani medicines are excluded from the study.

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REFERENCES

- Adams J S. Tashchian A & Stone T H. (2001).** Codes of ethics as signals for ethical behavior. *Public Productivity Review*, 5, 29(3), 199-212.
- Bajgier S M. Aggarwal L K. (1991).** Powers of goodness of fit statistics in detecting balanced mixed normal distributions. *Educational and Psychological Measurement*, 51, 253-269.
- Barnett V & Lewis T. (1996).** *Outliers in statistical data* (3rd ed.). New York: Wiley.
- Beu D S and et al. (2003). Ethical decision-making: "A multi-dimensional construct". *Business Ethics, A European Review*, 12(1), 88-107.
- Cassell C. Johnson P. & Smith K. (1997).** Opening the black box: Corporate codes of ethics in their organizational context. *Journal of Business Ethics*, 16(10), 1077-1094.
- Chonko LB. T R Wortuba and T W Loe. (2002).** Direct selling ethics at the top. *Journal of personal selling and sales management*, 22, 87-96.
- Crane A & Matten D. (2004).** *Business Ethics*. Oxford: Oxford University Press.
- Dubinsky A J. et al. (1992, Fall).** Ethical Perceptions of Field Sales Personnel: An Empirical Assessment'. *Journal of Personal Selling & Sales Management*, 12, 9-21.

Research Article

Farrell H and B Farrell. (1998). The language of business codes of ethics. Implication of knowledge and power. *Journal of Business Ethics*, 17.

Ferrell O C and J Fraedrich. (1991). *Business Ethics: Ethical decision making and case*. Boston: Houghton Mifflin Company.

Hunt S D. V R Wood and L B Chonko. (1989, July). Corporate ethical values and organizational commitment in marketing. *Journal of Marketing*, 53, 79-90.

Nagashekhara M and Ravindran Ramasamy. (2012, March). Machiavellian orientation among medical representatives in pharmaceutical industry. *Global Journal of Medical Research*, 12(2), 85.

Nagashekhara M and Syed Omar Syed Agil. (2012, February). Does Organizational culture influences the ethical behavior in the Pharmaceutical industry? *Journal of Basic and Clinical Pharmacy*, 3(1).

Page C and Meyer D. (2000). *Applied research design for business and management*. Sydney: McGraw-Hill Companies, Inc.

Schwartz M. (2001). The nature of the relationship between corporate codes of ethics and behavior. *Journal of business ethics*, 32, 247-262.

Sean Valentine and Tim Barnett. (2002). Ethics codes and sales professionals' perceptions of their organizations' ethical values. *Journal of Business Ethics*, 40(4), 191-200.

Sekaran U. (2003). *Research Methods for Business: A skill building approach*. New York: Wiley.

Sims R R. (1992). The challenge of ethical behavior in organizations. *Journal of Business Ethics*, 11(7), 505-513.

Singhapakdi A. (1993). Ethical perceptions of marketers: the interaction effects of Machiavellianism and organizational ethical culture. *Journal of Business Ethics*, 12, 407-418.

Singhapakdi A. Vitell S J & Franke G R. (1999). Antecedents, Consequences, and Mediating Effects of Perceive Moral Intensity and Personal Moral Philosophies. *Journal of the Academy of Marketing Science*, 27, 19-36.

Tabachnick B G & Fidell L S. (2001). *Using multivariate statistics*. Needham Heights, MA: Pearson education.

Tang T L P. Yuh-Jia Chen and Toto Suturso. (2008). The love of money, Machiavellianism, risk tolerance and unethical behavior. *Management decision*, 46(2), 243-263.

Trevino L K. K Butterfield and D McCabe. (1998). Ethical contexts in organizations: Influence on employee attitudes and behaviors. *Business Ethics Quarterly*, 8.

Tucker L R. Stathakopolous V & Patti C H. (1999). A multidimensional assessment of ethical codes: The professional business association perspective. *Journal of Business Ethics*, 19(3), 287-300.

Wortuba T R. (1990). A comprehensive framework for the analysis of ethical behavior, with a focus on sales organizations. *Journal of Personal selling and sales management*, 10, 29-42.

Wortuba T R. L B Chonko and T W Low. (2001). The impact of ethics code familiarity on manager's behavior. *Journal of business ethics*, 33, 59-69.