

Relationship Between Organizational Commitment and Ethical Decision Making among Health Care Managers in Yazd Province, Iran, 2014

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Abstract: The ability of managers to make decisions on ethical basis is a contributory factor for better management of values of different beneficiaries of organizations. Due to the importance of ethical decision-making in the health area and since organizational commitment is regarded among the positive reinforcing factors in the decisions made by managers of this area, in this study, the relationship between these two concepts was investigated. Findings indicated that Health-related sections in particular and other organizations in general must place improvement of ethical decisions among their top priorities. This capability is accompanied by growth and development and also reduced intention of occupation desertion among managers.

Key words: Ethical Decision Making • Healthcare Management • Organizational Commitment

INTRODUCTION

Today's leaders of medical and health organizations are challenged with numerous demands and issues. In confronting these issues, they must have the capability of decision making based on ethics [1]. Optimum combination of effective factors for decision-making process and nature prepares the ground for the formation of correct, appropriate and transcendental decisions [2]. It is said that ethical decision making is important in explaining the importance of ethics in performance of managers and there are different factors which can affect the ethical decision making [3].

Organizations must define a criterion for decision-making process to analyze the ethicality of decisions and answer questions such as: Was this decision ethical? Was this regulation fair? Did this resolution cause abasement, contempt, or damage to others? [4].

Besides the issue of ethical decision-making, organizational commitment is also among the factors that affect organizational behavior and influence many organizational variables including desertion intention, occupational performance, organizational citizenship behavior, rate of absence and occupational conflict and

stress [5]. Under current conditions, lack of considering ethical criteria by managers has aroused many concerns in organization, because managers are the ones who prepare the grounds for the improvement of organizational commitment by observing ethical principles [6]. In organizations (Like medical and health organizations) which face humane, financial and other sensitive issues due to their nature, importance of organizational commitment is much higher than other organizations [7].

Considering the importance of decision-making in health-related areas and the issues that decisions made in this area are directly related to the society's health and also organizational commitment can be regarded as a positive and reinforcing factor in adopting decisions made by managers in this field, the relationship between these two concepts was investigated in this study.

Conceptual Framework

Organizational Commitment: Organizational commitment is defined as the act of committing to a responsibility or belief [8]. A strong belief for the acceptance of organizational goals and values is defined as inclination for making a considerable amount of effort and preserving organizational membership [9]. Numerous studies have

shown that more committed people are more committed to organizational values and goals, participate more actively according to their roles and are less likely to leave organizations for finding new job opportunities [10]. Becker concludes that 'commitments come into being when a person, by making a side-bet, links extraneous interests with a consistent line of activity [11] Rahnavard and Radmanesh [12] stated that a direct (Positive) relationship between participation for decision-making and commitment.

Major outcomes of organizational commitment which also affect the organizational behavior include increase in the rate of intention to remain in organizations, feeling of satisfaction, attachment, dependence and devotion to organizations, more efficient organizational performance, decreased rate of desertion, active social behavior, lack of occupation desertion, altruism and helping colleagues, decrease in occupational stress and increase in organizational effectiveness and efficiency; these outcomes finally cause transcendence and achievement of organizational goals and the society can benefit from their advantages [13].

Three-part Model for Organizational Commitment (Allen & Meyer): In fact, most of the studies on organizational commitment have discussed three general topics: emotional attachment to organization, conceivable costs resulted from leaving organization and sense of obligation and duty to remain in organization, which implicate affective commitment, continuous commitment and normative commitment, respectively. Common point of these three perspectives is that commitment is a mental state which: a) defines the relationship between employee and organization and b) implicitly implicates person's continuation or termination of membership in an organization [10].

Ethical Decision-making: Ethical decision-making is used as the organized form of ethical contemplation for resolving ethical conflicts [14] and is defined as a process which is used by people in their morality to determine correctness and incorrectness of an issue. An ethical decision is executed through a four-step process: recognizing the ethical issue, ethical judgment, ethical intention and ethical behavior [15].

Since managers of small and large business encounter difficult ethical circumstances on the one hand and since decisions made by managers inherently contain ethical considerations on the other, it is important for managers to identify ethical elements which are scheduled

in their daily work performance [16]. Sullivan (1840) claimed that source of ethical decision-making is logical intellect and not the rules set by religions or rulers [17]. Numerous studies have been carried out on decision-making process by managers in public domain. Results of a study showed that public managers do not have sufficient knowledge about cooperative decision-making techniques. There is not a strong correlation between managers' attitude and their practical action for consulting subordinates in decision makings and managers of public departments only ask for the views of their superiors before making a decision and then make a decision[18].

Measuring ethical decision-making is not a new topic and a number of scales have been introduced in order to provide the necessary insight in this area. For example, Rest's Defining Issue Test (DIT) (1979) has been used in many studies to measure steps of ethical growth, while Forsyth's Ethics Position Questionnaire has been applied to determine ethics ideology [19]. Similarly, Lind's Moral Judgment Test measures moral judgment and Sashkin's managerial values profile focuses on ethical preferences. Finally, Reidenbach and Robin's Multidimensional Ethics Scale (1988, 1990) which is also used to measure personal ethics preferences considers 5 moral philosophies including Justice, Relativity, Egoism, Utilitarianism and Deontology. All of these tools have strong points and, despite their weak points, they create a better understanding about ethical decision-making [19].

There are different views about ethics in health care area. Based on these ethical viewpoints, a wide range of ethical principles has been developed to guide reasoning and decision-making [19].

Ethical egoism is a school from ethics philosophy or ethics framework which judges about morality of an action based on such outputs that maximizes people's benefits. In business, this ethical egoism might be defined as maximizing economical result or maximizing results for reputation. One dimension can create the best result in terms of economic benefits based on economic criteria such as profit and cost reduction. Another dimension might focus on preserving reputational benefits and elevating organizational position and reputation.

Utilitarianism's framework is consequentialism and, based on consequences of each action, it states that each person must act in the direction of creating more benefit for the majority of people [20]. In this school, two important dimensions exist: act utilitarianism and rule utilitarianism. Act utilitarianism is based on the idea that, in order to create the best thing, it is necessary to evaluate each proposed action by considering the most

possible benefit for most people (Beneficiaries) [21] or by selecting the act that provides the greatest social good [22]. On the other hand, rule utilitarianism proposes that a rule must be followed to achieve maximum benefit while, following a given rule may not facilitate the greatest social good, the rule in the long run will result in decisions that generate the most societal benefit. Generally, utilitarianism framework evaluates external consequences of an action [21] and benefit and consequence are the core ideas of this concept [19]. Bowen [23] said some weakness for this school he believed that "the majority always wins in a utilitarian analysis, reinforcing the status quo. This type of majority rule might go against what would innately judge as ethical. Oftentimes, a small minority can raise serious ethical issues that should be attended to regardless of the number of people in agreement with the majority". Finally, he stated that this school despite these weaknesses if applied consciously can be used in ethical issues.

Framework of moral virtue is internally focused on individual or his/her personal characteristics (Personal virtue), which leads to improved personal wellbeing or improved life with respect to others (Others' virtues) [21]. In contrast to virtualism, deontology is not highly dependent on personal skills and is mainly focused on acceptable rights and duties. Based on deontology, morality does not depend on the consequence of an action or decision, the principle is that each person must act similar to the action of other people (Under the same circumstance) [20]. Deontological theory basically focus on social rights rather than the methods and the motivations in a particular behavior [24]. This philosophy presents a clear guidance to ethical decision making [23].

MATERIALS AND METHODS

The present cross-sectional analytical study was performed on April 2014. Final samples of the study included 295 personnel (Medical support) and 19 first-ranking managers (Whose appointments were issued more than 3 months ago) from 11 educational hospitals, 2 deputy departments (Medical and health) and 7 medical and health networks (Cities of Yazd, Mehriz, Ardakan, Bafgh, Meybod, Taft and Abarkuh) which were selected from among all the managers and personnel of educational hospitals and managers and personnel of medical and health networks in Yazd Province and managers and personnel of health deputy department and medical deputy department in 2014. In this study, the sampling technique for personnel selection was stratified sampling

in proportion to the number of personnel. The sampling technique for selecting managers was census method so that questionnaires were provided for all managers of each department. The studied personnel completed two questionnaires about managers' ethical decision-making and effective factors for ethical decision-making based on their own perspectives. Health care managers of the above-mentioned departments also completed 3 questionnaires including Managers' Ethical Decision-making, Effective Factors for Ethical Decision-making and Organizational Commitment based on their own viewpoints.

Measurement Tool: In order to evaluate organizational commitment in this study, Allen and Meyer's organizational commitment standard questionnaire (1990) containing 24 questions was used. In this scale, three dimensions of organizational commitment (Emotional attachment, continuous commitment and normative commitment) are analyzed where sum of these dimensions determines the overall score for organizational commitment. Questions 1 to 8 analyze affective commitment, questions 9 to 16 measure continuous commitment and questions 17 to 24 evaluate normative commitment among the interviewees. The questions are designed based on 5-point Likert system starting with "I completely disagree" with score 1 to "I completely agree" with score 5. Scores for this scale are within the range of 5 to 40. In this questionnaire, 9 questions [4- 6, 8, 9, 12, 18, 19, 24] have a reverse coding. The questionnaire was created based on a study by Ansari and Ardakani [4] using exploratory factor analysis through principle component method. Also, three dimensions were extracted and reliability of affective commitment, continuous commitment, normative commitment and organizational commitment were obtained as 89.4, 89.3, 78.7 and 91%, respectively, using Cronbach's alpha method in this study Cronbach alfa for organizational commitment were obtained 0.75. Since this questionnaire had a standard design, its face and content validities were verified, validity of organizational commitment in this study was obtained through three experts in healthcare management.

In order to analyze ethical decision-making, Casali's managerial ethical profile multi-dimensional scale (2010) for managers was used. This scale is composed of 24 items which analyzes 8 factors: economic egoism, reputational egoism, rule utilitarianism, act utilitarianism (Virtue of self, virtue of others, act deontology and rule deontology. All the items of this scale are designed based

on a 5 point (I completely agree, I agree, Average, I disagree, I completely disagree) scale. Score range for this scale was within 24 to 120 points. Designers of this scale have calculated the internal consistency for items of MEP scale as 0.88 using Cronbach's alpha method. In the present study, first this scale was translated into Persian and then principle component analysis was performed on these 24 items. In this analysis, varimax rotation was applied and the inclusion criterion was the eigenvalue of more than unity. After the analysis of principle components, four factors including deontology, economic egoism, act utilitarianism and virtue of self were extracted. These four factors defined 42.48, 8.97, 7.64 and 5.47% of MEP's construct variance, respectively. KMO value was obtained as 0.900 in this study, which indicate the appropriate sample size for the analysis of principle components. Bartlett test with the value of ($X^2_{(153)} = 2718.579$, $p < 0.001$) showed that the factor separation was correct. This questionnaire was only available in the original English language; therefore, linguistics had to confirm its Persian version for users of Persian language; so, the questionnaire's face validity was checked and verified by backward translation method.

In order to calculate internal reliability of MEP scale, Cronbach's alpha method was applied. Results of this study demonstrated that the internal reliability of MEP scale was generally 0.91 and this value was 0.89, 0.84, 0.89 and 0.70 for MEP's sub-scales, respectively. These values were significant at Cronbach's alpha level 0.05.

In order to analyze the effective factors for ethical decision-making, multi-dimensional scale of personal, organizational and external factors effective for ethical decision-making [36] was used. This scale is composed of 28 items which evaluates three components of personal factors (11 item), organizational factors (11 item) and external factors (6 items). All the items of this scale are designed based on a 5-point (I completely agree, I agree, Average, I disagree, I completely disagree) scale. Score range of this scale is from 28 to 140. Designers of this scale have calculated the internal consistency for items of personal, organizational and external factors as 0.89. In the present study, first, this scale was translated into Persian and then the principle component analysis was carried out on these 28 items. In this analysis, varimax rotation method was used and the inclusion criterion was of eigenvalue of more than unity. After the principle component analysis, six factors including organizational factors, external, group counseling, judgmental, professional counseling factors and personal factors were

extracted. These six factors defined 32.73, 12.65, 7.24, 5.23, 4.42 and 4.25% of the construct variance for the effective factors for ethical decision-making. In the present study, KMO value of this scale was 0.8, which indicated the appropriate sample size for the principle component analysis. Face validity of this questionnaire was checked and verified using backward translation method.

Bartlett test with the value of ($X^2_{(325)} = 3879.401$, $p < 0.001$) showed that the factor separation was correct. Cronbach's alpha method was used to determine internal reliability of this scale. Results of this study demonstrated that internal reliability of the effective scale for ethical decision-making was generally 0.89 and 0.87, 0.82, 0.84, 0.70, 0.80 and 0.72 for the sub-scales, respectively. These values were significant at Cronbach's alpha level 0.05.

Statistical Methods: In order to interpret the data, first, data description was carried out using measures of central tendency (Mean) and standard deviation. Also, in the inferential section, research hypotheses were tested based on statistical methods. Therefore, after extracting and importing the data into a computer, SPSS 20 software was used to analyze them. In order to measure correlation between the variables, Spearman's and Pearson's correlation methods and independent t-test were used.

RESULTS

In this section, description of findings is first presented. Then, using statistical methods, research hypotheses are tested. In this study, four hypotheses are tested:

First hypothesis– There is a relationship between organizational commitment and managers' ethical decision-making.

Second hypothesis– There is a relationship between possible effective factors for ethical decision-making and managers' ethical decision-making.

Third hypothesis – There is a relationship between possible effective factors for ethical decision-making and degree of ethical decision-making (From personnel's perspective).

More than half of the personnel were women (61%). Regarding education, 62.4% of the personnel had BSc degree and more than one quarter (27.1%) were 31-36 years old. Approximately half of the personnel had work experience of 10 years and more. With respect to job rank distribution, maximum ratio was related to employees (60.7%).

Table 1: Principal component analysis of the scale items in ethical decision making

Items	1	2	3	4
Deontology($\alpha=0.89$)				
Take decision that bieng able to empathise with client	.778			
Take decision that Mintaining a fair process at all times	.762			
Take decision that acting openly when making decision	.700			
Take decision that making "care for the sick" paramount in determining decision alternatives	.699			
Take decision that treating others as you want others to treat you	.689			
Take decision that ensuring the organization "duty of care" is maintained at all times	.654			
Take decision that ensuring confidentiality is maintained at all times.	.648			
Take decision that respecting dignity of those affected by the decisions	.579			
Take decision that not harming the clients/patients				
Economic egoism($\alpha=0.84$)				
Take decision that optimising resources of the district/hospital/unit/dept		.782		
Take decision that protecting the reputation of the organization		.754		
Take decision that minimising costs for the organization		.723		
Take decision that generating the greatest overall benefits for the district/hospital		.681		
Take decision that attaining organizational yearly budgets		0.721		
Act utilitarianism(0.89)				
Take decision that creating the greatest overall benefit for the local community			.817	
Take decision that creating the greatest overall benefit for the wider community			.792	
Virtue of self($\alpha=0.70$)				
Take decision that being most in line with your core personal value				.853
Take decision that being most in line with person you want to be				.844

Table 2: Scale components of ethical decision-making, along with the amount of explained variance and alpha values of each dimension

Factors	Scale	Number of items	Scores range	Mean	SD	Percentage of explained variance	α
Deontology		9	9-45	36.91	5.52	42.48	0.89
Economic egoism	MEP	5	5-25	21.49	3.11	8.97	0.84
Act utilitarianism	Scale	2	2-10	8.14	1.54	7.64	0.89
Virtue of self		2	2-10	7.96	1.47	5.47	0.70

Regarding health care managers, 94.7% were married and more than 94% had BSc or a higher degree. In the field of study, maximum percentages were related to general practitioners (15.8%), health and medical service managers (15.8%), medical experts (10.5%) and other fields of study (5.3%). Maximum ratio was related to the samples between 31 and 36 years old, 26.3% of whom were working for 6 to 9 years in the organization. Regarding work experience, maximum ratio was related to the samples with 7 to 11 years of work experience (42.1%). Mean value and standard deviation of the managers' work experience were 8.15 and 5.41 years, respectively.

The data presented in Table 1 indicate that, among health care managers in Yazd Province, affective commitment with the mean value of 30 ± 4.21 had maximum score for organizational commitment and minimum value for organizational commitment was related to continuous commitment with the mean value of 22.73 ± 3.98 .

According to data in Table 2, comparison between the mean value of viewpoints of managers and employees regarding to components of ethical decision-making showed a statistically significant difference between their views on the extent to which managers applied deontology, economic egoism, act utilitarianism and virtue of oneself. Obtained results from these tables suggested that managers and employees believed that deontology was a more important determining factor than other dimensions (Economic egoism, act utilitarianism and virtue of oneself) and was also a preferred criterion for managers' decision in 2014.

Testing the Research Hypotheses

First Hypothesis: There is a relationship between organizational commitment and managers' ethical decision-making.

Table 3: Principal component analysis of factors influencing ethical decision

Factors	1	2	3	4	5	6
Organizational($\alpha=0.87$)						
being in line with the hospital/district code of ethics/conduct	0.826					
following ethical principles learnt during training provided by the organization	0.799					
being in line with the organizational culture	0.715					
following ethical principles that learn him during formal studies	0.658					
being in line with the mission statement of the company	0.606					
reaching a decision based on using evidence-based process	0.571					
External($\alpha=0.82$)						
encouraging the technological advancement in term of hardware and software where given high preference		0.723				
covering existing health gaps in the community needsa(Social)		0.701				
promoting protection such as reduction of chemical waste and energy savings(Environmental)		0.678				
fulfilling macro economic factorsa(Economic)		0.650				
identify particular gaps between the community health needs and the current level of satisfaction of those needs by competitors(competition)		0.647				
Political agendas compared to medical needs		0.516				
Group consultation) $\alpha=0.84$)						
Making the decision independently but getting more information from collaborators			0.816			
Making a decision independently but asking for tokenistic consultation from subordinates			0.799			
Making a decision independently and using the information available to you at the time.			0.777			
Making a decision independently and only informing subordinates			0.773			
Judging) $\alpha=0.70$)						
Reaching a decision by inspiring others				0.746		
Reaching a decision by bargaining with superiors and subordinates				0.675		
Reaching a decision by using personal judgment				0.589		
Relying heavily on your personal value in making decisions				0.564		
Expert advice($\alpha=0.80$)						
Being guided by your professional experience					0.520	
Making a decisions collaboratively through facilitation and engagement of subordinates					0.717	
Being guided by experts in their fields					0.543	
Individual) $\alpha=0.72$)						
Receiving rewards or minimising punishment to yourself					0.861	
Following your personal moral values regardless of other people's opinion					0.701	
Fulfilling expectation of your colleague and boss					0.690	

According to Table 3, it can be noted that degree of correlation between organizational commitment and degree of ethical decision-making for the studied population was equal to 0.244. Regarding the relationship between organizational commitment and different dimensions of ethical decision-making, virtue of oneself had maximum correlation with organizational commitment with degree of 0.264. On the other hand, normative commitment and ethical decision-making had maximum degree of correlation (0.412) among various dimensions of organizational commitment. Regarding the correlations of dependent and independent

variables, maximum degree of correlation was related to normative commitment and virtue of oneself with the value of 0.581 and affective commitment and act utilitarianism with values of -0.463. In other words, by increasing normative commitment and affective commitment among managers, level of virtue of oneself increased on one hand and level of act utilitarianism decrease on the other.

Second hypothesis: There is a relationship between effective factors for ethical decision-making and managers' ethical decision-making.

Table 4: Component of factors influencing ethical decision with explained variance and alfa value for each dimension

scale	Factors	α	Percentage of explained variance	SD	Mean	Score range	Number of items
factors influencing ethical decision	Organizational	0.87	32.73	3.93	23.95	6-30	6
	External	0.82	12.65	3.84	23.34	6-30	6
	Group consultation	0.84	7.24	3.29	14.35	4-20	4
	Expert advice	0.80	5.23	2.56	11.62	3-15	3
	Judging	0.70	4.42	3.11	13.48	4-20	4
	Individual	0.72	4.25	2.50	10.96	3-15	3

Table 5: Descriptive statistics of organization commitment and its dimension among healthcare manager in Yazd province

Factors	SD	Mean	Skewness	Elongation	Minimum	Maximum
Affective commitment	4.21	30	0.482	1.45	21	39
Continuousecommitment	3.98	22.73	0.187	0.241	16	32
Normativecommitment	2.71	26.05	-0.118	1.046	20	32
Organizationalcommitment	7.13	78.78	0.056	1.44	64	96

Table 6: Comparison mean score of EDM scale's from personnel and managers perspective

Group	Scales				T	Significance level
	Personnel		Managers			
	SD	Mean	SD	Mean		
Deontology	5.52	36.91	2.06	40.84	3.08	**0.002
Economic egoism	3.11	21.49	1.83	23.36	2.59	*0.01
Act utilitarianism	1.54	8.14	0.911	9.05	2.52	*0.012
Virtue of self	1.47	7.96	1.72	6.89	3.03	*0.016
Total EDM	9.44	74.52	4.25	80.15	2.58	*0.01

*significance level at 0.05, ° **: significance level at 0.01

According to the data in Table 4, degree of relationship between effective factors for ethical decision-making and degree of ethical decision-making in the studied population was equal to 0.215. In other words, it can be concluded that the more the managers believed that effective factors for ethical decision-making played a more important role in applying ethical decision-making in their positions, the more the degree of their ethical decision-making within the statistical population would be. Among effective factors for ethical decision-making and various dimensions of ethical decision-making, economic egoism dimension had maximum degree of correlation with effective factors for ethical decision-making with the value of 0.323. On the other hand, organizational factor and ethical decision-making had maximum degree of correlation among effective factors for ethical decision-making as well as its dependent variable with the value of 0.512. Regarding the correlations for effective factors for ethical decision-making and ethical decision-making,

maximum degree of correlation was related to organizational factor with two dimensions of economical egoism (0.682) and virtue of oneself (0.339). In other words, it can be concluded that the more the managers believed that organizational factors played a more important role in applying ethical decision-making, the more the degree of economical egoism and virtue of oneself would be among them.

Third hypothesis: There is a relationship between effective factors for ethical decision-making and degree of ethical decision-making from employees' perspective.

According to data presented in Table 6, it can be observed that there was a strong, positive and significant correlation between effective factors for ethical decision-making and degree of ethical decision-making based on employees' views ($r=0.664$; $p=0.000$). In other words, the more the level of effective factors for ethical decision-making, the more the degree of ethical decision-making would be.

Table 7: Output of Pearson correlation test between organizational commitment and ethical decision making

		EDM				
		Dimension of EDM				
	Organizational commitment	EDM	Virtue of self	Act utilitarianism	Economic egoism EDM	Deontology
Dimension of Organizational commitment	Organizational commitment	r=0.244	r=0.264	r=-0.067	r=0.210	r=0.126
		p=0.314	p=0.245	p=0.787	p=0.388	p=0.607
	Affective commitment	r=0.90	r=-0.053	* r=-0.463	r=0.058	r=0.383
		p=0.715	p=0.828	p=0.046	p=0.815	p=0.105
	Continuousecommitment	r=0.062	r=0.133	r=0.279	r=0.174	r=-0.262
		p=0.802	p=0.588	p=0.247	p=0.477	p=0.278
	Normativecommitment	r=0.412	**r=0.581	r=0.133	r=0.208	r=0.121
		p=0.08	p=0.009	p=0.586	p=0.393	p=0.623

N=19

Table 8: Pearson correlation test output between factors influencing ethical decision and ethical decision making

		Dimension of EDM				
EDM	Factors	EDM	Virtue of self	Act utilitarianism	Economic egoism	Deontology
Factors influencing ethical decision making		r=0.215	r=-0.096	r=0.057	r=0.323	r=0.212
		p=0.376	p=0.697	p=0.817	p=0.177	p=0.383
Factors	Organizational	*r=0.512	r=0.339	r=-0.028	**r=0.682	r=0.324
		p=0.025	p=0.156	p=0.910	p=0.001	p=0.176
	External	r=0.156	r=-0.154	r=0.201	r=0.056	r=-0.171
		p=0.525	p=0.530	p=0.409	p=0.821	p=0.484
	Group consultation	r=0.173	r=-0.019	r=-0.235	r=0.326	r=0.272
		p=0.479	p=0.939	p=0.333	p=0.172	p=0.260
	Expert advice	r=-0.029	r=0.226	r=-0.331	r=0.268	r=-0.120
		p=0.907	p=0.351	p=0.167	p=0.268	p=0.624
	Individual	r=-0.196	r=-0.056	r=-0.062	r=-0.238	r=-0.116
		p=0.422	p=0.820	p=0.800	p=0.327	p=0.635
	Judging	r=-0.034	r=-0.207	r=-0.273	r=-0.076	r=-0.055
		p=0.890	p=0.396	p=0.257	p=0.757	p=0.821

N=19

Table 9: The correlation between the factors affecting EDM and EDM

		Dimension of EDM				
EDM	Factors	EDM	Deontology	Economic egoism	Act utilitarianism	Virtue of self
Factors influencing the ethical decision making		**r=0.664	**r=0.325	**r=0.456	**r=0.572	**r=0.598
		p=0.000	p=0.000	p=0.000	p=0.000	p=0.000
Factors	Organizational	**r=0.848	**r=0.290	**r=0.493	**r=0.584	**r=0.630
		p=0.000	p=0.000	p=0.000	p=0.000	p=0.000
	External	**r=0.827	**r=0.265	**r=0.411	**r=0.487	**r=0.562
		p=0.000	p=0.000	p=0.000	p=0.000	p=0.000
	Group consultation	**r=0.654	**r=0.175	**r=0.208	**r=0.251	**r=0.211
		p=0.000	p=0.000	p=0.000	p=0.000	p=0.000
	Expert advice	**r=0.751	*r=0.116	**r=0.390	**r=0.514	**r=0.576
		p=0.000	p=0.046	p=0.000	p=0.000	p=0.000
	Judging	**r=0.417	**r=0.283	r=0.035	r=0.084	r=0.083
		p=0.000	p=0.000	p=0.554	p=0.142	p=0.155
	Individual	**r=0.524	** r=0.344	r=0.090	r=0.199	*r=0.124
		p=0.000	p=0.000	p=0.121	p=0.000	p=0.034

N=295

*significance level at 0.05,° **: significance level at 0.01

Among various effective factors for ethical decision-making and ethical decision-making, organizational factors had maximum correlation ($r=0.848$) with degree of ethical decision-making (Dependent variable) at the significant level of less than 1%. At lower levels, internal dimensions and professional counseling had a correlation with ethical decision-making variable with ($r=0.827$; $p=0.000$) and ($r=0.751$; $p=0.000$), respectively. In other words, the more the level of internal dimensions and professional counseling, the more the degree of ethical decision-making would be from employees' perspective. On the other hand, among dimensions of ethical decision-making, dimension of deontology had a strong, positive and significant correlation with general effective factors for ethical decision-making at the error level of less than 1% ($r=0.598$; $p=0.000$).

Among sub-scales regarding each of dependent and independent variables, it can be observed that, between all the sub-scales related to ethical decision-making and ethical decision-making, there was a significantly positive correlation at the error level of less than 1% and significance level of 99%. The judgmental dimension and personal dimensions of effective factors for ethical decision-making did not have a statistically significant correlation with economical egoism and act utilitarianism at 95% significance level. In this case, organizational dimensions and deontology had maximum degree of correlation ($r=0.63$; $p=0.000$). Organizational dimension and economic egoism took the next place of correlation with ($r=0.584$; $p=0.000$). Therefore, in general, hypothesis 4, stating a relationship between effective factors for ethical decision-making and employee's decision-making, was verified.

DISCUSSION

Objective of this study was to investigate the relationship between organizational commitment and ethical decision-making among health care managers in Yazd Province. Based on the discussed analysis, all the assumptions of this study were verified.

Score of managers' organizational commitment (78.78) was slightly higher than the mean value. Saleh *et al.* [25] evaluated the score for ward nurses' organizational commitment as 103.68; Rehan & Islam also found that among the employees of different banks, affective commitment has the highest score [26]. Among dimensions of organizational commitment, affective commitment gained more attention than two other dimensions,

because it was the most effective factor for desertion of organization. Many scientists have reported the importance of emotional characteristics for the absence and desertion of organizations. Therefore, affective commitment has been stated as the most beneficial form of commitment and the main measurement in commitment studies [26].

Similar to the present study, the relationship between ethical decision-making and organizational commitment among the statistical population was proved ($r=0.224$), Yusoff *et al.* [28] found that organizational commitment ($P<0.01$, $r=0.239$), codes of ethics and rewards significantly influenced ethical decision making of managers in oil and gas based companies. Nadi and Hadheghi [29] reported a significantly positive correlation between ethical environment and organizational commitment ($r=0.334$).

In a study by Shirvani [30] found no difference between managers' and employees' views about degree of applying eternal law, utilitarianism, distributive justice and deontology by managers. In other words, employees believed that managers applied utilitarianism more than other factors, while managers stated that, regarding eternal law, they applied distributive justice and deontology more than other factors and there was no difference between managers' and employees' views about personal freedom. According to the results of the present study, both personnel and managers believed that deontology dimension was stronger in decisions and act utilitarianism and economic egoism had the same standpoint as other dimensions.

Nergiz *et al.* [24] said that "In ethical decision-making, cultural, industrial and organizational environment and the personal experiences of the individual are influential. Participation of all groups in decision-making process, fairness of decision-making process, truthfulness in decision-making process, considering people's status and dignity in decisions and considering the organization's mission in priority [32] can contribute to better decisions. In this context, Bowen [23] also declared that there are some encouraging factor of ethical decision making which include" a strong organizational culture that emphasizes the importance of ethics. It is claimed that organizations which have ethical codes and principles act more ethical than other organizations [35, 36]. Recent studies have also reported that ethical codes play an important role in preparing guidelines for improving managers' ethical decision-making [35-37].

Other studies performed on morality and decision-making, including the present study, have mentioned the importance of organization's internal and external environment, environmental pressure and personal factors [38] in ethical decision-making. Furthermore, effects of punishment and bonus (Personal dimension) and taking an educational course in the area of morality (Organizational dimension) on managers' judgment have been also confirmed [35], which was in agreement with the results of this study.

Limitations: One of the limitations of this study was that it was a cross-sectional work which made generalization difficult.

Another limitation was that those managers who have been recently appointed were excluded from the study.

CONCLUSION

Health and medical managers have a trusteeship responsibility for the organizations they have undertaken. Importance of ethical decision-making in this section is doubled due to the importance of people's health. On the other hand, organizational commitment, which is originated from morality, can be effective for improving decisions-making by health care managers and receiving admiration and trust. It is recommended, like some countries, to prepare moral principles for health care managers in order to guide them through decision-making process and also to increase their fidelity to ethical decision-making. Forming organizational ethics committees are a strategies to creat a balance between the use of personal values and professional resources in resolving ethical issues. The importance of clearing decision made in organization, having better and high quality relation with staff are other important issues that should be consiedered in the management of an organization.

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