Research Article

Nursing Curricula Are Not Enough to Improve the Students' Moral Judgment Competence

Víctor Hugo Robles Francia

Universidad Popular Autonoma del Estado de Puebla, Calle 21 Sur No.1103, Barrio de Santiago, 72410 Heroica Puebla de Zaragoza, Puebla, Mexico

Author E-mail: victorhugo.robles@upaep.mx; Tel: 52 (222) 229.94.00 (7431 ext.) Fax (222) 309 94 02

Abstract

It is assumed that the higher education positively impacts the student's moral reasoning. The purpose of this research was to examine the effectiveness of nursing curricula into improvement of students' moral judgment competence in a public university in Hidalgo, Sate of the Mexico country. Data was collected through survey exploration with the Moral Judgment Test completed by 384 nursing students of all semesters. The Moral Judgment Competence was evaluated by C index. The C index score was the same for senior and freshman students. The curricula did not improve the senior students' C index, more hours of Social Humanistic content were not associated with the senior students' C index score. Additionally, the results indicated that Moral Judgment Competence is the same in any gender of the students. Planned moral judgment competence in nursing curricula is necessary to improve students' moral reasoning. In this paper, background, theoretical framework, results are discussed.

Keyword: moral judgment competence, nursing curricula, students, descriptive study, Mexican public university

INTRODUCTION

The university has a positive impact on the moral development rather than the academic experience or specific courses on ethical judgment. The higher education impacts positively the student's moral reasoning. The literature indicates that significant gains on the moral reasoning and the growth of moral stages are related to the age and the educational level (Nather, 2013). In this millennium, socioeconomic factors and a complex transfer of the health system have created unique aspects for nursing professionals. Increasing cultural diversity, technological developments for a better and longer life and promoting innovative universal health guidelines are current trends that could promote ethical conflicts in nursing (McLeod-Sordjan, 2014). Due to the current complexity, nurses are not prepared sufficiently for facing the diverse types of conflicts.

However, efforts have been made in the implementation of ethics education through best practices. Recent studies have shown that nursing graduates are not interested on patients or either patients' interests or delve into moral conflicts. The practice of the nursing has barriers for practicing ethics with a critical reflection and instead they use the conventional reasoning. Therefore, nursing educators should explore the technical evaluation on ethics into the curricula (McLeod-Sordjan, 2014).

Historically, more than 100 years ago, nursing leaders developed ethics codes and curricula that shaped the basis of moral reasoning in nursing. Ethics in nursing education has a vital importance to ensure the professional development in nursing role. Multiple educational pathways for the introduction of nursing practice have developed unique challenges for

educators to provide a broad liberal curriculum all inclusive (McLeod-Sordjan, 2014).

Losa Iglesias and De Bengoa Vallejo (2014) reported that nurses believed that the ethical and legal issues were important in everyday clinical practice. In the same study, participants showed great ignorance about the content of international codes and missions of ethics committees (Losa Iglesias and De Bengoa Vallejo, 2014). These authors noted that nurses did not have enough knowledge about ethical and legal issues, and that some kind of training courses on ethical decisions and professional nursing legislation were required. Also, participant nurses recommended learning through focus groups and workshops. This, even that nurses could have a university education on professional ethics, bioethics and health legislation. Further recognizing that nursing education requires greater emphasis and periodic updating of knowledge related to ethics codes and international health law (Losa Iglesias and De Bengoa Vallejo, 2014).

On the issue of ethics in Mexico, the ethics committees of clinical practice arose in response to the program of the institutionalization in the Mexican Social Security Institute and of the Mexican health legislative recommendation. Valdez-Martinez et al. (2008) investigated 619 Mexican health centers in 2005, they reported that 503 (81.3%) did not have any ethics committee in the clinical practice and this implied a national requirement of a greater effort to establish them and create the procedures for the new committees and implement strategies to improve the operation of some ones, in order to achieve results consistent with their mission (Valdez-Martinez et al., 2008).

In addition to the role of ethics committees in Mexico, Lagunes-Cordoba and Hernandez-Manzarares (2012) developed an instrument to evaluate the nurses' ethical behavior, based on Mexican professionals, with a validated factorial analysis and a high reliability. In this test, nurse who took care and tried to regain the patient's health is evaluated, the patient qualifies the nurse's ethical behavior and his (her) humanistic values. Moreover, de Jesus Posos-Gonzalez et al. (2011) validated a questionnaire that established a Nursing Method Indicator. This questionnaire had twenty six (26) items corresponding to assessment, diagnosis, planning and execution, with an internal validation.

Besides the effort for shaping a nursing method indicator, Martínez (2010) identified the nursing skills level of community service providers in Mexico. The results of twelve thousand four hundred and thirty two (12,432) university nursing students, between 2006 and 2008, showed that: 30.2% had a performance not sufficient, 3.0% an outstanding performance, 50.5% satisfactory and 16.0% hardly enough. The lowest results were obtained in the area of instrumental.

The Martínez's (2010) findings showed that all community service providers exercised, or had exercised as professionals according to the institutional regulations and served in the staff of health institutions, where they were approximately 11% of the workforce in the Ministry of Health. This author also noted that resident nursing interns are the basis of health care for the rural population. However, according to the Martinez's results, about one third of the interns did not show the minimum skills. In this sense, it is imperative to conduct regular assessments and strengthen their skills before starting the social service, and who have a strong academic and professional supervision during the term of the internship (Martinez, 2010).

The complexity of the professional nursing rules, the breach of the ethics committees, the lack of knowledge about national and international ethics codes, the economical-social complexity and the health system complications require a high moral reasoning of the nursing students in Mexico. In this country, moral reasoning has not been sufficiently studied. Some investigation results (Barba, 2002) show the relationship between age, schooling and moral judgment, and the moral development is positively associated with age and schooling, but this author did not find gender significant differences in college adults (Barba and Romo, 2005).

Barba and Romo (2005) found that students entering in the university education with the same moral judgment, regardless of gender or type of institution, and only in some cases, students showed an increase in their moral judgment by their university training to advanced semesters. These same authors revealed that students of Philosophy had the highest moral judgment than others, while the less developed were the computing engineering students and the technicians. Moreover Robles' studies (2010, 2012) showed that the moral judgment competence of the management freshmen had a mean score of 18 points, without reporting gender differences.

The moral judgment competence about the intent or moral ideals, is the relationship between these moral ideals and moral decisions taken daily (Lind, 2004). Kohlberg (1964) noted, is "the ability to make decisions and judgments which are moral (based on internal principles) and act in accordance with such judgments" (p. 425). This competence involves the emotional aspect and the cognitive structure, heading for the contextual daily practice and can be learned through exercises (Lind, 2009).

None of the antecedent presented on the competence or the moral judgment in Mexican populations have been applied to nursing. In this area, as shown, only some efforts to study problems on the ethics committees have been done (Losa Iglesias and de Bengoa Vallejo, 2014) and explores organizational effectiveness (Valdez-Martinez et al., 2008), besides some attempts for designing tools and technical skills assessments or clinical procedures. The specific purpose of this research was to evaluate the moral judgment competence of college students into the nursing curricula of a public institution in the state of Hidalgo, Mexico country.

This research was guided by the following questions:

a) What are the patterns of moral judgment competence of a population of university nursing students in Hidalgo, Mexico? Some background on this in Mexico established that management students of a University had 18 points of moral judgment competence (C index) (Robles, 2010; 2012). In this sense, hypothesis 1 was set as following:
    The Moral Judgment Competence of a population of university nursing students has a value equal to 18 points.

H1: $C_n = 18$

b) Are there significant differences in the moral judgment competence among the nursing college students from different semesters? Ethical educators suggest that there are critical components for an effective curriculum on moral education. The dimension of ethics education could be a critical factor in the development of students' moral reasoning ability (Park et al., 2012). The new students, without taking classes related to nursing ethics, have a lower level that someone who already took someone and also the students of intermediate semesters will have a lower level than individuals studying the last semester. The competency-based education model assumes increasing gradually. In some cases the moral judgment is further increased in semesters most advanced that in the first (Barba, 2005). So, hypothesis 2 was set as following: The Moral Judgment Competence MJC of the first semester students (C_{1s}) is less than the MJC of the second semester students (C_{2s}) and so on until the MJC of the eighth semester students (C_{8s}):

H2: $C_{1s} < C_{2s} < C_{3s} < C_{4s} < C_{5s} < C_{6s} < C_{7s}\ C_{8s}$

c) Are there significant differences in moral judgment competence between genders? Some researcher in Mexico (Barba, 2002) found no significant gender differences in the Colleges adults (Barba, 2002; Barba and Romo, 2005). So, hypothesis 3 was set as following: There are not significant differences in moral judgment competence between female (C_F) and male students (C_M).

$(C_F) = (C_M)$

METHOD

A descriptive process was done in this research, which was applied at a public University in Hidalgo, México. Where the students of all semesters and their curricula were analyzed. The moral judgment competence of three hundred and eighty four (384) nursing students in fifteen (15) groups was assessed. The Moral Judgment Competence was evaluated by C index and the participants answered the Moral Judgment Test. Data was registered by SPSS and an ANOVA analysis was executed.

Participants

About protection of human research subjects, the Institutional Review Board criteria were fulfilled by this investigation, which researched on the effectiveness of curricula into improvement of students' moral judgment competence. Participants were the nursing students from a public university in Hidalgo, state of the Mexico country. The students' provinces were the follows: Hidalgo three hundred and fifty one (351), Mexico State sixteen (16), Mexico City one and sixteen (16) participants did not write theirs. In the nursing curricula, students study Social Humanistic subjects in six of eight semesters, with thirty four (34) credits in this area. All students were selected from first to last semester. Participants were three hundred and eighty four (384) students in fifteen (15) groups, predominantly female with three hundred and forty two (342), only forty two (42) males, with mean scores of: 21 years and 14 academic years. The test was applied in the final period from May to June, 2015.

Table 1. School Credits, gender and age of the nursing students

Semester	Social Humanistic Hr. Credit	Student by semester	Group	Female	Male	Mean Age	Mean academic years
First	3 6	63	1	27	4	19	12.6
			2	26	6	20	12.4
Second	--------	78	1	22	2	19	12.7
			2	27	1	20	13.0
			3	23	3	20	12.9
Third	3 4	48	1	21	2	20	13.7
			2	22	3	21	18.7
Fourth	--------	70	1	25	1	20	14.2
			2	17	5	21	14.0
			3	20	2	20	14.1
Fifth	3 6	21	1	18	3	21	14.5
Sixth	3 6	50	1	27	0	22	15.0
			2	19	4	22	14.8
Seventh	3 6	32	1	30	2	23	15.6
Eighth	3 6	22	1	18	4	23	15.5
Total	18 34	384		342	42	21	14

Note. Students of the first semester took the Sociology of Nursing class, with 3 hours of theory, six academic credits, where they studied humanistic and social professional genesis. Students in the second semester did not take any Humanistic Social class. In the third semester, students studied the ethics in nursing class, with 1 theoretical hour, 2 practical hours, 4 academic credits, which scholars studied issues of ethics, bioethics, values, ethics applied to the nursing and thanatology nursing. In this class, students learned activities such as literature research, concept maps, charts and discussions. The fourth semester students did not study any social humanistic class. The fifth semester students learned on the health and society class, which considers different perspectives, cultural, economic and political, with 3 theoretical hours and 6 academic credits. In the sixth semester, students took the Developmental Psychology class, this is related to the human process at different stages of the content lifecycle, and this class had 3 theoretical hours and 6 academic credits. The seventh studied the Mental Health class, which aims to understand the health factors of the individual in society, with 3 theoretical hours and 6 academic credits. Finally in the eighth semester, the students took the Nursing legislation class, which included issues on law, the Mexican Constitution on health, medical arbitration, labor law, quality indicators, in 3 theoretical hours and 6 academic credits.

MATERIALS AND PROCEDURE

The Moral Judgment Test (MJT) was applied. This test is a validated instrument in Mexico by Lind (2001). In this instrument, the participant's judgment is in conflict with nonconventional behavior. The MJT items are constituted in a multivariate experiment N = 1 (Lind, 2008), which consists of two stories written as dilemmas, pro and against arguments about the protagonist's decision, where each argument represents a moral stage of the six described by Kohlberg (1992). In the questionnaire, the most important objective is to record the quality of the decision and not the pro or against decision. The participants are asked to judge the arguments: Six sentences in favor and six against on the protagonist's decision, on a -4 to +4 scale. The MJT contains 24 items, 12 for each one of the two dilemma that individual must analyzes. Before judging each one of the arguments, the individual is asked to judge how right or wrong the decision was taken by the protagonist (Lind, 2008).

The Moral Judgment Competence was evaluated by C index and this index was quantified by a SPSS algorithm, similar to the variance analysis of a factor. After the descriptive statistics, the analysis of variance was executed to accept or reject the null hypothesis.

RESULTS

a) Hypothesis 1, the Moral Judgment Competence (C index) of a population of university nursing students has a value equal to 18 points, was supported.

Table 2. The moral judgment competence (C index), mean and standard deviation

Mean	N	Standard deviation
18%	384	11%

Note. The mean C index% for all participants (N = 384) scored 18 points and standard deviation 11. The mean C index% was consistent with other results on the moral judgment competence of university students (Robles, 2010; 2012).

b) Hypothesis 2: The Moral Judgment Competence (C index %) of the first semester students (C_{1s})is less than the C index of the second semester students (C_{2s}) and so on until the c index of the eighth semester students (C_{8s}), was not supported.

\
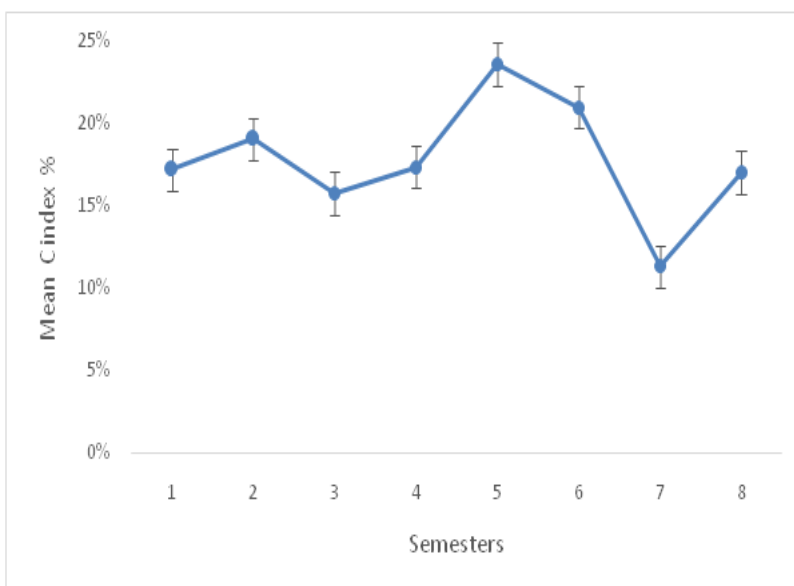
Figure 1. In the first semester, where the nursing curricula had the Sociology of Nursing class with 3 hours of theory, six academic credits, the moral judgment competence (C index) of the nursing students from the first semester (C_{1s} = 17) was less than the second (C_{2s} = 19), where they did not take any humanistic social class. C index was increased two points, but in the 3th semester was decreased 3 points (C_{3s} = 16), in this, the nursing curricula has the ethics in nursing class, with 1 theoretical hour, 2 practical hours, 4 academic credits, where students learned issues about ethics, bioethics, values and thanatology nursing. In this class, the learning activities designed and displayed in the Nursing Curricula are: literature research, concept maps, charts and discussions. In the fourth semester was increased just one point (C_{4s} = 17), in this semester students did not take any social humanistic class. In the fifth (C_{5s} = 24) was increased 7 points, here the nursing curricula presents the health and society class, which considers different topics, cultural, economic and political, with 3 theoretical hours and 6 academic credits. In the sixth was decreased 3 points (C_{6s} = 21), where nursing curricula shows the Developmental Psychology class, this is related to the human process at different stages of the content lifecycle, with 3 theoretical hours and 6 academic credits.

The Nursing curricula indicates the Mental Health class in the seventh semester, which aims to understand the health factors of the individual in society, this class has 3 theoretical hours and 6 academic credits. Nevertheless, in this semester C index was decreases 10 points (C_{7s} = 11). In the last semester, the eighth, the scholars took the Nursing Legislation class, which included issues on law, the Mexican Constitution on health, medical arbitration, labor law, quality indicators, in 3 theoretical hours and 6 academic credits. In this end semester, the students' C index finished at 17 points (C_{8s} = 17), the same at the end than in the beginning semester (see figure 1), so the C index was as follows:
$C_{1s} < C2_s > C_{3s} < C_{4s} < C_{5s} > C_{6s} > C_{7s} < C_{8s}$

Table 3. C index ANOVA between groups

	Sum of squares	Fd	Mean Square	F	Sig.
Between groups	0.516	14	.0373	.355	.000
Within groups	4.055	369	.0110		
Total	4.572	383			

Note. The moral judgment competence of groups of all the semesters had significant differences, even among groups of the same semester. The one-way analysis of variance (ANOVA) was used to compares the means between groups of all the semesters and determined that means are significantly different from each other. Specifically, the null hypothesis tested was: H_0: $C_{1s} = C_{2s} = C_{3s} = C_{4s} = C_{5s} = C_{6s} = C_{7s} = C_{8s}$. A statistically significant result was obtained, Sig-score (0.000) was lower than 0.05 and then the null hypothesis was rejected.

Table 4. C index % among groups of all the semesters

Group	Semester	Social Humanistic	Hr. Credit	N	Mean C index	Standard deviation
101	One	3	6	31	20%	13%
102				32	14%	9%
201	Two	--------		24	21%	11%
202				28	19%	10%
203				26	17%	11%
301	Three	3	4	23	10%	7%
302				25	21%	13%
401	Four	--------		26	18%	9%
402				22	16%	9%
403				22	18%	10%
501	Five	3	6	21	24%	13%
601	Six	3	6	27	20%	11%
602				23	22%	11%
701	Seven	3	6	32	11%	8%
801	Eight	3	6	22	17%	11%
Total		18	34	384	18%	11%

Note. Differences between groups were as follows: The group 101 of the first semester, had 20 points, while the group 102, the same period, had 14. The results in the second semester were more homogeneous, the 201 group recorded 21 points, the 202 and the 203 achieved 19 and 17 points. There were significant differences between groups of the third semester, the group 301 got the lowest score, 10 points, while the 302 acquired 21. There were no significant differences in the fourth semester, the group 401 observed a value of 18 points, the 402 of 16 and the 403 of 18. There was only one group in the fifth semester, the 501 group that recorded 24 points, the maximum value of all groups. In the semester 6, the 601 group obtained a value of 20 points and the 602 of 22. There was only a group in the semester 7, the group 701, which recorded 11 points, the second lowest value and the semester 8, the only 801 group, obtained 17 points.

c) The hypothesis 3, there are not significant differences in moral judgment competence, C index, between female and male students was supported.

Table 5. Mean C index, gender

Gender	Mean C index %	N	Standard deviation %
Female C_F	17.76	342	11.03
Male C_M	17.95	42	10.13
Total	17.78	384	10.92

Note. The mean C index (C_F) of the 384 women was 17.76 (Sd = 11.03) and the mean of the 34 men was 17.95 (Sd = 10.13).

Table 6. C index ANOVA between gender groups

	Sum of squares	Fd	Mean Square	F	Sig.
Between groups	.000	1	.000	.010	.919
Within groups	4.571	382	.012		
Total	4.572	383			

Note. Specifically, the null hypothesis tested was: H_0: $C_F = C_M$. A statistically significant result was obtained, Sig-score (.919) was greater than the significance level (0.05) and then the null hypothesis was accepted (see table 6). These results were consistent with other precedents (Robles, 2010; Barba, 2005; Barba and Romo, 2005), which showed that there were not significant differences between female and male C index.

DISCUSSION

The study answered the McLeod-Sordjan' suggestion (2014) that nursing educators should explore the evaluation on ethics into the curricula. The analyzed university nursing curricula contained Social Humanistic issues in six of eight semesters and covered just an ethics class, with 3 hours a week. C index of intermediate semesters students had scores very high but also very low.

The findings agree with the Park et al. (2012) argument, planned moral judgment competence in nursing curricula is necessary to improve moral reasoning of students. More credits, hours and the modification of learning technics are necessary to advance the moral judgment competence into all semesters of the curricula. Learning activities, as cases analysis, solve problems, discussion of dilemmas or short stories, about moral issues, experiences in the nursing field and the university context can help to improve the senior students' moral judgment competence.

The mean moral judgment competence of the university nursing students had an equal score of other students, for example, the management students (Robles, 2010). This despite nursing profession had the mission: To be a professional with high humanistic values, conscious, ethical and critical on the professional performance, to the pursuit of quality and warmth in nursing services. And the analyzed curricula contained an important value as life; its objective was to help and reintegrate the patient's health, highlighting the value of life in their professional lives. This highlights on the work of other professionals. But these values were not a significant difference.

Also, this investigation no significant gender differences were found, supporting other previous studies, as Nwankwo's (2013) results who found that gender was not significantly associated with moral judgment. This contradicted the Wang and Calvano' (2015) findings who analyzed the relationships between gender and business ethics education and their results indicated that women are generally more inclined to act ethically than men.

CONCLUSION

The studied curricula did not improve Moral Judgment Competence (C index) in senior students, more hours of Social Humanistic content were not associated with C index scores of senior students. This research had the limitation that studied only the nursing curricula in a specific University and the results cannot be generalized to other universities neither other careers.

References

Barba B(2002). Influencia de la edad y de la escolaridad en el desarrollo del juicio moral. REDIE. Revista Electrónica de Investigación Educativa. *4*(2): 22-45.

Barba B, Romo J(2005). Desarrollo del Juicio Moral en la Educación Superior. Revista Mexicana de Investigación Educativa. *10*(24): 67-92.

de Jesús Posos-González M, Salazar-Mejía A, Ramiréz-Tabales C, Cortés-Poza D, López-Alvarenga J, Téllez-Ortiz S, García-Flores M(2011). Lecciones aprendidas en la construcción del instrumento de evaluación "FIME" (Formato Indicador para el Méto de Enfermería). Revista Médica Del Hospital General de México. 74(3): 118-125.

Kohlberg L(1964). Development of moral character and moral ideology. En M. L. Hoffman, L. W. Hoffman, M. L. Hoffman, & L. W. Hoffman (Edits.), *Review of Child Development Research* (Vol. 1. Pp. 381- 431). New York: Russel Sage Foundation.

Kohlberg L(1992). *Psicología del desarrollo moral, AsunZubiaur Zárate (Trad.), .* Bilbao: Desclée de Brouwer.

Lagunes-Cordoba R, Hernández-Manzarares M(2012). Escala de evaluación de la conducta ética del personal de enfermería en el cuidado de los pacientes. Aquichan. 12(3): 252-262.

Lind G(2001). Validity Study of the Mexican Version of the Moral Judgment Test, MJT, University of Konstanz, fb Psychologie. Retrieved April 7 2008: www.uni-konstanz.de/ag-moral/b-publik.htm.

Lind G(2004). The meaning and measurement of moral judgment competence revisited – A dual-aspect model. En D. Fasko, & W. Willis, Contemporary Philosophical and Psychological Perspectives on Moral Development and Education (Pp. 185-220). Cresskill NJ: Hampton Press.

Lind G(2008). The Moral Judgment Test. Recuperado el 7 de Abril de 2008, de http://www.uni-konstanz.de/ag-moral/mut/mjt-certification.htm#certified_versions

Lind G(2009). Favorable Learning Environments for Moral Development – A Multiple Intervention Study With 3.000 Students in a Higher Education Context. Annual conference of AERA. San Diego.

Losa Iglesias M, de Bengoa Vallejo R(2014). Nurse attitudes in relation to health care ethics and legal regulations for nursing. *Acta Bioéthica* 20(2): 255-264.

Martínez F(2010). Competencias profesionales de los pasantes de enfermería, medicina y odontología en servicio social en México. *Revista Panamericana De Salud Publica.* 28(4): 298-304.

McLeod-Sordjan R(2014). Evaluating moral reasoning in nursing education. Nursing Ethics 21(4): 473-483.

Nather F(2013). Exploring the impact of formal education on the moral reasoning abilities of college students. *College Student* J. 47(3): 470-477.

Nwankwo B(2013). Role of Gender, Emotional Empathy, Interpersonal Attraction on Moral Judgement. *IFE Psychologia.* 21(2): 264-276.

Park M, Kjervik D, Crandell J, Oermann M(2012). The relationship of ethics education to moral sensitivity and moral reasoning skills of nursing students. Nursing Ethics. 19(4): 568-580.

Robles V(2010). El papel del rol y el contexto en la competencia del juicio moral: estudiantes de negocios vs. burócratas. Revista de la facultad de Ciencias Económicas de la Universidad Militar Nueva Granada. 18: 169-177.

Robles V(2012). Complejidad De La Moralidad Organizacional: Una Discusión Sobre Diferentes Roles. Sotavento. 20: 106-117.

Valdez-Martínez E, Lifshitz-Guinzberg A, Medesigo-Micete J, Bedolla M(2008). Los comités de ética clínica en México: la ambigua frontera entre la ética asistencial y la ética en investigación clínica. Pan American J. Public Health. 24(2): 85-90.

Wang L, Calvano L(2015). Is Business Ethics Education Effective? An Analysis of Gender, Personal Ethical Perspectives, and Moral Judgment. J. Bus. Ethics. 126(4): 591-602.