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Assessment of Health Care Providers Knowledge, Attitude and Practice towards Professional Ethics in Public and Private Health Facilities in Ambo Town, Central Ethiopia, 2016.

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Abstract
With spectacular advances in Medical Sciences, many ethical issues related to healthcare have risen, which needs to be dealt with extreme sensitivity and professionalism in line with various codes of Medical Ethics. This study aimed to assess Health Care Providers Knowledge, Attitude and Practice towards professional ethics in Ambo Town. A cross-sectional study design was used from May-June 2016 on total sample of 114 health professionals. The study was conducted using structured questionnaires, adopted from previous related studies. The questionnaire was self administered. The responses were based on a 5 point Likert scale: 1-strongly disagree, 2-disagree, 3-not sure, 4-agree and 5-srongly agrees. Finally the collected data were analyzed using SPSS version 20. The study revealed that about 63% of the respondents know Hippocrates's oath and only 12% knowledgeable about five principles of medical Ethics. …..
Keywords: professional Ethics, principles , Ambo Ethiopia

1. Background

Although ethics as applied to medical practice dates back to the ancient civilization by the symbolic adherence to the Hippocratic Oath, codes of conduct and laws regulating the profession are devised and updated from time to time. (1) Developing countries are rapidly catching up with global trends in this area especially pertaining to liabilities and litigations. (2) Medical ethics have common features in different countries. However, each country adopts certain modification according to prevailing local culture, religious beliefs, social norms and standards of medical practice. (3) With spectacular advances in Medical Sciences, many ethical issues related to healthcare have risen, which needs to be dealt with extreme sensitivity and professionalism in line with various codes of Medical Ethics. (4)& (5) Complaints against healthcare professionals appear to proliferate. This may be a reflection of both an increased public awareness as well as the inappropriate practices by the healthcare professionals (6).

Dissatisfaction is reflected in expressions about poor ethical conduct (7). Growing public awareness regarding the ethical conduct of healthcare practitioners and complaints against physicians appear to be escalating. (6) The cases of medical negligence are highlighted due to the dynamics of the society whereas, in the mind of patient or his relatives, they expect assured recovery and results. But, now the changing concept is, the doctor has to put various options available for treatment and the patient has to choose one of them (8). Malpractice litigation has become a central fact of existence in the practice of medicine today. This tsunami of lawsuits has led to a high volume of irreconcilable rhetoric and ultimately threatens the stability of the entire health care system (9). The recent raise in litigation against healthcare practitioners is definitely an issue of immediate concern (10).

Health care error is the 8th leading cause of death in the world. Over 7 million people across the globe suffer from preventable surgical injuries every year (WHO). Globally, 234 million surgeries take place every year, one in every 25 people undergo a surgery at any given time. In developing countries, the death rate was nearly 10% for a major surgery. Mortality from general anesthesia affected one in 150 patients while infections were reported in 3% of surgeries with the mortality rate being 0.5% (11). Death due to medical error is very common; the report of the Institute of Medicine in 1999 showed that around 44,000 to 98,000 hospitalized patients die each year due to preventable error; the 5th common cause of death in USA, more than deaths due to motor vehicle accidents, breast cancer and AIDS. (12)

Data is scarcely available on deaths due to medical errors in developing countries; even though, retrospective chart review done on eight developing countries covering 25 hospitals reported that mortality due to medical errors is very high (13). In fact, WHO estimates that 1 in 300 admitted patients die of preventable medical errors. (14)

Studies have reported that among adverse events, a significant number of cases, ranging from 23 to 27.6% are due to negligence (15) & (16). Medical malpractice claim is very low compared to occurrences of adverse medical events due To negligence: one among eight patients fills medical malpractice claims (17).

This work could be used as a review for further study on the topic. This study also can be beneficiary for any organization interested in intervening and implementing the Professional ethics.

2. Methodology

2.1 Study area and Period: Ambo town, the capital of west Shewa zone of Oromia regional state, is located about 112km from Addis Ababa in southwest direction. The town has a total population of 79,059 of which females are 39,506 and males are 39,553. The town is established on 1,320 hectares of a plain land and altitude of 2,169m above sea level, with "*woinadega"* type of climatic condition. Administratively, Ambo town structured as three urban "*kebeles"*. The town has 2 hospitals, 2 Health centers, 8 Lower Clinics and 15 Medium level clinics. The town is estimated to have about 216 Health professionals. The Study was conducted from May 26-2016 to May 28-2016.

***2.2* Study Design, Sample Population and sample size determination:** Institution based quantitative cross sectional study was used. Randomly selected Health professional from health facilities in Ambo town were study subjects. Health professionals who were registered were included in the study while students on clinical attachment were excluded from this study.

Sample size was determined using single population proportion formula ($n = (Z^{\alpha/2})^2 pq/d2$) considering confidence level at 95%=1.96, 5% margin of error and P value was estimated from a related study [18]in Northern Nigeria as ($p \leq 0.16$) or 16%. Finally 114 samples were studied.

2.3 Sampling Procedure and Data Collection:

There were 216 health care providers in Ambo town. Among this (47) physicians, (110) nurses, (29) public health and (30) other the respondents were allocated proportionally. Then the study participants (114 health care providers) were selected by Random sampling method.

Data was collected using self-administered questionnaires. A structured questionnaire was prepared in English adopted from other related studies [19]- [18]tools on the knowledge, attitude, and practices of Medical Ethics

2.4 Operational Definitions:

- **Good Knowledge**: if the participant answered greater than the mean of the knowledge assessing questions
- **Good Attitude**: if he/she answered correctly greater than the mean of the Attitude assessing questions
- **Good Practice:** if a respondent doesn't have any malpractice history in the practice assessing questionnaire (All or None)
- **Heath professional**: Pursuant to Article 2(30) of FDRE proclamation No. 661/2009, the term "health professional" is defined as a physician who is licensed by the executive organ to examine and diagnosis human disease and treat them , by drug or surgical operation or any other health professional who is authorized to perform such activity

2.5 Data Quality Control:

In order to assure the quality of data the following measures was undertaken.

- ✓ Data was collected by six Public Health undergraduate students. The data collectors have basic knowledge how to ask for permission of the study group and fill the questionnaire.
- ✓ There was a meeting & discussion session on how to collect in similar procedure among the six data collectors.
- ✓ In addition, the completeness, accuracy and consistency of the collected data were checked on daily basis during the data collection time.
- ✓ The tools were pretested on Ginchi health center after the proper permission is acquired.

2.6 Data Processing and Analysis:

Data analysis was conducted using statistical package for social sciences version20 (SPSS for windows). Data was edited, cleaned, coded, entered, and analyzed using $SPSS_{20}$.

The responses for the attitude questions were based on a 6 point Likert scale: 1- strongly disagrees, 2-disagree, 3-nietheragree nor disagree, 4-agree, 5-srongly agree and 6-not sure finally descriptive analysis was done.

3. Results

In this study data was collected from 100 randomly selected health professionals in Ambo town health institutions with response rate of 88%.

3.1 Socio Demographic results

The mean age of the participants was 40 $\pm$ 8 with minimum age of 22 while the maximum age is 60. The majorities (56%) of the Professionals are married while 44% are single and among these participants 65% are male. The studies showed that majority of the professionals are Oromo. There were 22 Physicians participated in the study among these 19 have 1st degree while the rest 3 were specialists. The mean monthly income of the participants is 5,125.46 + 4,630.10 ETB with the minimum of 1,500.00 ETB and 40,000 being the maximum monthly salary of the participants. (Table 1)

Table 2: Socio Demographic status of Health professionals in Ambo town, May 2016 (n=100)

SOCIO DEMOGRAPHIC FACTORS		Frequency	Percentage
Gender			
	Male	65	65
	Female	35	35
Religion	Orthodox	41	41
	Protestant	51	51
	Muslim	1	1
	Catholic	1	1
	Others	6	6
Ethnicity	Oromo	90	90
	Amhara	7	7
	Others	3	3
Age			
	<=24	15	15
	25-34	60	60.0
	35-44	14	14.0
	45-54	9	9.0
	>=55	2	2.0
Occupation			
	Physician	22	22
	Nurse	54	54
	Public Health	12	12
	Others	12	12
Level of Education			
	1st Degree	82	82
	2nd Degree	6	6
	Others	12	12
Experience			
	>=10 yrs	81	81.0
	11-20 yrs	12	12.0
	21-30 yrs	3	3.0
	>=31 yrs	4	4.0

3.2 Knowledge of Health Ethics among the health professionals

The majority (99%) of the participants responded that they know what health ethics is while only 1% reported that he/she doesn't. From those 99 respondents 47% of them get their knowledge about health ethics from training. 63% of the respondents know Hippocrates's oath while 37% do not. Also 79% of the respondents reported that they know what medical negligence is.

However only 12 participants (12%) knew the five major principles of Medical ethics, from these participants 7%s knew only one component. Public health professionals knew more (33.3%) about the five major principles of Medical Ethics while 9.1% of Physicians and 7.4% Nurses have the same knowledge. Forty four percent of the respondents responded that they don't have the access for code of conduct of their profession. Generally 31% of the participants had good knowledge. (Table 2)

Table 3: Assessment of Knowledge of Ambo town Health professionals about Medical Ethics, May 2016 (n=100)

Knowledge and Source of Knowledge of Medical Ethics Result	Frequency	Percent
Source of knowledge (n=99)		
Training	47	47.5
Work Experience	22	22.2
Lecture or Seminar	23	23.3
Personal Reading	4	4
Media	2	2
Others	1	1
Number of Principle of medical Ethics known(n=12)		
1		
2	7	58.3
3	2	16.8
4	1	8.3
5	1	8.3
	1	8.3
Source of the code of conduct for those who have the access (n=56)	42	75
In the Institution	7	12.5
From Internet	4	7.2
From Colleagues	3	5.4
Others		
Poor Knowledge	69	69
Good knowledge	31	31

3.3 Attitude of the health professionals towards medical Ethics

Many participants agreed with the idea that Ethics is only important to avoid legal conduct while 68% of the participants agree on wish of a patient/client is always must be adhered to. Fifty two percent of the participants agreed that a health professional need to tell patients condition for close relatives.

Out of 100 respondents 31 health professionals believed that consent is needed only for operation not for medications and other services. Forty six respondents disagreed that active Euthanasia (assisting a patient who wants to die) should be an ethical view of point. (Table 3)

Table 4: Attitude of Ambo town Health professionals about major components of Medical Ethics, May 2016 (n=2016)

Attitude questions	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Not sure	Total
Ethics is important only to avoid legal conduct	12	25	5	33	18	7	100
Whish of Patient always must adhered to	19	49	4	18	4	6	100
Best irrespective of Patients Opinion	12	22	16	31	13	6	100
Told if something is Wrong	30	43	7	10	7	3	100
Confidentiality can't be kept	6	19	4	36	33	2	100
Tell Pt condition for close Relative	14	38	15	22	8	3	100
Consent is needed only in Operation	8	23	9	38	15	7	100
Children shouldn't be treated without the consent of parent except in Emergency	26	34	9	24	3	4	100
Violent Pt shouldn't be treated	1	22	7	39	27	4	100
Patient not accept Rx Should find another Dr.	13	34	20	24	7	2	100
Health professionals can't refuse Abortion	22	30	11	21	9	7	100
Pt who wish to die must be assisted	6	10	6	32	39	7	100
Publish hospital information without hospital approval	4	13	7	34	34	8	100
Patient photo without consent published	4	13	3	37	39	4	100
Medical Ethics is not applied in Ethiopia	20	62	18	0	0	0	100

Attitude	GP (n=22)	Nurse (n=54)	Public Health	Other	Total
Poor	6(27.7%)	30(55.6)	9(75)	7(58.4)	52 (52%)
Good	16(72.3)	24(44.4)	3(25)	5(41.6)	48 (48%)

3.4 Practice of medical Ethics among the health professionals

Most of the participants (55%) prefer to consult Ethical committee if ethical/Legal problem happens while the 12% prefer head of their department. From the participated professionals 44% had intervened on a patient without consent. Out of this 44 professionals 54.5% were due to the unconsciousness of their patient, 29.5% due to mentally ill patient, 29.5% on underage patient who came without attendant and 9% due to miscellaneous causes. From 100 respondents 36 of them reported that they leave a patient if their shift is over. Out of this 36 professionals 30.6% reported that they leave their patient always, 5.6% often while 63.8% reported sometimes. Generally 24% of the professionals had good practice. (Table 4)

Table 5: Practice of medical ethics among health professionals in Ambo town, May 2016 (n=100)

Practice	Occupation				
	GP	Nurse	Public Health	Other	**Total**
Good Practice	6	14	2	2	24
Poor Practice	16	40	10	10	76

Out of the total participants 66 peoples have caused an accident to their client/patient out of these participants 2 of them encountered a temporary suspension of their license as a correctional procedure. 71% of the study participants reported that they haven't given a sick leave for their patient without the proper reason. (Fig 1)

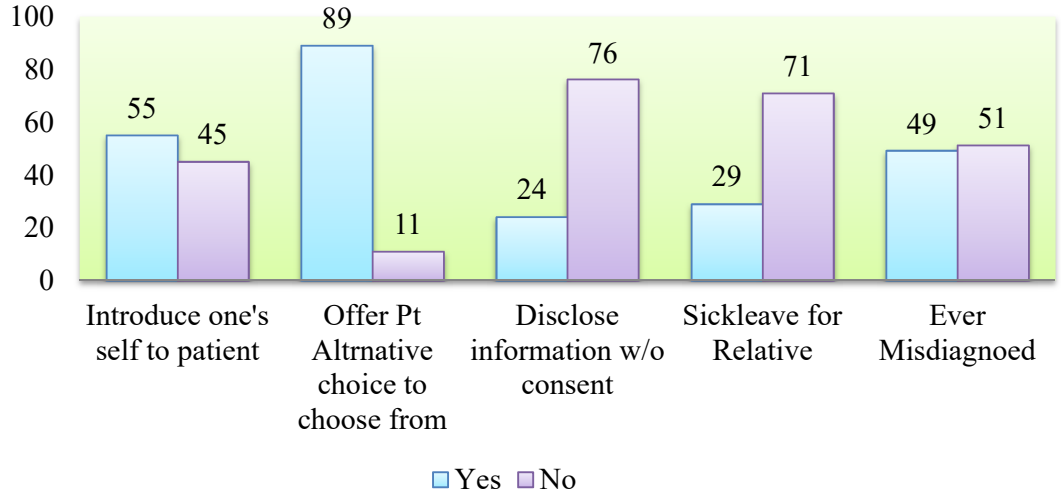

Figure 5: Practice of medical ethics among Ambo town Health Professionals, May 2016 (n=100)

From the professionals who caused death Eight have been imprisoned the other 2 were left for money compensation and the other 2 for temporary license withdrawal. (Fig 2)

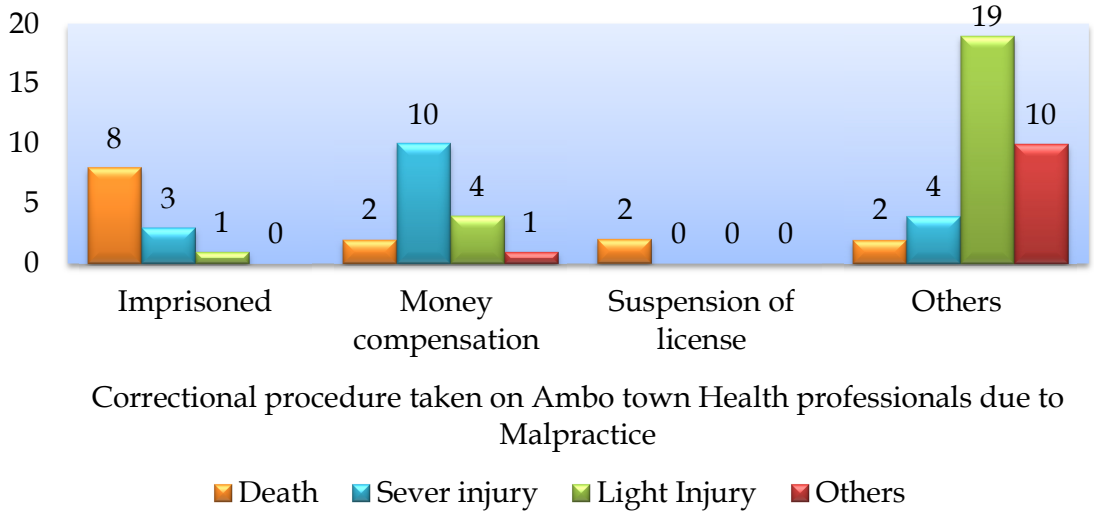

Figure 6: Correctional procedure taken on Ambo town Health professionals due to Malpractice, (n=100)

4. Discussion

The fact that over 37% of the respondents agreed that ethics is important only for legal purpose Indicates that there is knowledge gap regarding health care ethics in the studied settings. This finding was related with a study conducted in Nigiria by Kehinde F. et al [20] However, this is in contrast to similar study among Caribbean health workers where majority of the respondents (94%) disagree with this view [21]. A study in Nigeria suggested this may probably reflect the low level of awareness of health care consumers in sub-Sahara Africa of their rights and of health care providers' obligation to respect those rights [20]

According to the international and National regulations, autonomy should always be respected in all adult and mentally competent patients. In our study most of the Health professionals (69%) had poor knowledge regarding autonomy and gave mixed responses about patient's rights when the questions were differently phrased. Almost similar results have been reported in the study by Hariharan et al, where most of the respondents were of the view that patient's wishes may not be respected at all times [22]. Similarly Sadan et al have reported that most of the physicians thought that patients should be involved in decisions about their health. However, when asked about ethical problems, their responses were not consistent with previously expressed views [23].

Confidentiality is among the core issues of doctor patient relationship [19]. The maintenance and breach of confidentiality under certain specific circumstances is extensively discussed and stressed upon in medical code of ethics. However, in our study 24% of the health professionals disclosed the patient's information without his/her consent. In a study by Humayun et al, confidentiality disclosure was taken care of only in a minority (10.8%) of Health professionals.[40] In the study by Hariharan et al, 93% of the respondents considered confidentiality to be important but 37% were in favor of informing relatives about patient's condition [21]

One phenomenon highlighted in previous reports is the difference between East Asian countries and North America/Europe as regard the locus of authority in decision-making: North America/Europe demands and promotes the value of individual autonomy; East Asian countries typically honor and uphold the value of family autonomy [24] & [25]. The philosophy in sub-Saharan African countries is similar to Asian countries. In a well written appraisal of the four principles of medical ethics plus attention to scope by Gillion, he emphasized the tendency to disagree about scope of application of the principle of ethics especially about to what or to whom we owe these moral obligations [26]. Health care workers in Africa similar to Asia communities are more likely to be confronted with moral conflicts because of the less demands for self actualization of their people compare to their counterparts in the West.

Many respondents (44.0%) agreed that "doctor should do what is best" irrespective of the patient's opinion. On a similar study in sub-Saharan Africa stated that 44% agreed to adhering to "patient's wishes", but on the other hand over two-third of the respondents (68.7%) agreed that "doctor should do what is best" irrespective of the patient's opinion [20]. The findings in this study like similar study in India reflect the paternalistic approach to patient care. However, modern medicine seeks to avoid a paternalistic (doctor knows best) approach to patients [27]. Ethiopian medical code of Ethics states on Article 47(b) that In the case of the patient who is capable of comprehending the information given to her/him about psychotropic drugs the patient's right to refuse treatment must be respected.

We discovered that most of the respondent health professionals introduce their self to their patient, discussed the disease and its treatment options with the patient. Quratul Ain et al also reported that majority of the physicians discussed the disease and its treatment options with their patient [28].

5. Conclusion and Recommendation

This study has shown gap in Knowledge, Attitude and Practice of healthcare ethics among both physicians and non-physician health care providers in our setting. For the field of healthcare ethics to continuously advance, healthcare workers need to devote more attention to ethical reflection. It is necessary to train the professionals to the formulated medical ethics within the context of the individual socio-economic, geo-political, religious and cultural background and providing the code to be available in each health care delivery institutions.

The need for periodic continuing education or training on clinical ethics utilizing a multidisciplinary approach to bridge the gap in ethical knowledge, Attitude and Practices between different healthcare personnel cannot be overemphasized.

6. List of Acronyms and abbreviation

- **AIDS**- Auto Immune Deficiency Syndrome
- **ETB**- Ethiopian Birr
- **FDRE**- Federal Democratic Republic of Ethiopia
- **GP**- General Practitioner
- **Pt**- Patient
- **Rx**- Treatment

- **SPSS**- Statistical Package for Social Science

7. DECLARATION

Ethics approval and consent to participate: The study was reviewed and approved by the Health Research Ethics Review Committee of Ambo University of Ethiopia. Informed written consent was obtained from parents or caregivers. Confidentiality of information collected from each study participant was not disclosed**.**

Consent to publish: All authors have read the content of the manuscript and had common understanding regarding the finding of the study. They also have agreement to publish it under this journal.

Availability of data and materials: all data regarding this study is available and it can be send up on request.

Competing interests: The authors also declare that there are no any other financial or nonfinancial competing interests.

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Author's contribution: EM and KT guide proposal preparation, data collection and assists final report writing. AA conceptualized the research question, analyzed and interpreted the findings. All Authors have read the manuscript and had common understanding regarding the study.

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