

BIO ETHICS AWARENESS AND COGNITIVE OPINION AMONG MEDICAL AND NON-MEDICAL PROFESSIONALS THROUGH BIG SCREEN FILMS: A CROSS SECTIONAL STUDY

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ABSTRACT

BACKGROUND: A successful medical practice is possible only when the bioethical dilemmas are tackled properly by the clinicians which demands high level of knowledge and awareness regarding bioethics for both the doctors and the patients. One of the easiest and popular medium of creating the awareness is through cinemas and televisions.

AIM: To access the level of bioethics awareness and cognitive opinion regarding the same among medical and non-medical professionals.

MATERIALS AND METHOD: A total of 128 participants participated in the study via online questionnaire forms of which 49 were medical professionals and 79 were non – medical professionals. Permission and ethical clearance were obtained from the Department of Public Health Dentistry, SRM Dental College, Ramapuram, Chennai. A set of 18 closed ended questions along with the video clippings were used for the data collection. The responses obtained were recorded and tabulated. Statistical analysis was done using SPSS software version 26.0 (SPSS Inc., Illinois, Chicago, USA) and Chi Square test was performed for descriptive analysis regarding Bioethics awareness and Cognitive opinion on bioethics.

RESULT: Among the responses obtained, Medical Professionals were n=49 (38.28%) and Non – medical professionals were n=79 (61.71%). 77.7% of medical professionals and 55.2% of non-medical professionals were found to have more level of bioethics awareness and 62% of medical professionals and 51.6% of non-medical professionals had satisfactory cognitive opinion regarding the bioethics. The association between medical and non-medical professionals was done and p value <0.005 was considered to be statistically significant.

CONCLUSION: Bioethics and health care services must go hand in hand which is beneficial for both the healthcare workers and the public. From the plethora of methods and platforms available to teach bioethics in a practical way, Cinema also called the big screen films is an ideal tool and platform to educate public on bioethics awareness since it has really got greater impact on its viewers. This awareness becomes very crucial when it comes to patients gaining trust and confidence on their doctors and health care workers which is the back bone for every successful treatment.

KEYWORDS: Bioethics, Medical professionals, Non-medical, Cinema, Big screen films

INTRODUCTION :

Bio - meaning life and ethics means -habits, customs, behaviours of human beings and values. It is a branch of applied ethics that is emerging in academic and professional set up, and used as a critical tool for discussions and debates focused on the consolidation of democracy, citizenship, human rights and also, social justice.^[1] Ethics comprises of the study of human values, the ideal human character, morals, actions, and goals and precisely ethics implies action according to moral standards.^[1] Ethical values are an integral part of medicine and cannot be separated from biological facts. Bioethics leads to the consideration of issues that affect the entire society and not just the human being who procures the medical treatment.^[2] The understanding and internalizing the principles of bioethics enables health professionals to accept their patients as humans and not a subject and these principles of bioethics serve as an ideal tool for health care professionals to deal with the ethical/bioethical issues. Every patient is unique in a way and must be considered and treated via holistic approach. Solid ethical base becomes highly critical for health professionals to face the various ethical dilemmas of their professional practice.^[2] Excerpts from television shows and films can be used to highlight challenging ethical dilemmas in a variety of settings, which can be incorporated from the theoretical context to practical practise. Screenplays and screenwriting are two sources which serves as a strong form of reflective learning which can provide knowledge to current medical ethics teaching.^[3] Apart from depicting predominantly fantasy stories, in many cases films also reflect day-to-day realities. Throughout the history of cinemas, they are attracted to the world of health and sickness, medical practices, patients suffering from illnesses, bioethical issues, patient – physician relationship and research works. ^[4] Bioethics also deals with ethical issues arising from the scientific and technological advances.^[5] Based on the description of consistent

facts, conflicts, and existing moral problems the pre-existing bioethics must be applied practically in day-to-day situations. By providing clear details with images, feature films and televisions offer rich and textured details of cases, including the patient's perspective and the clinical reality. Since films also provide a detailed ethnography which allows for a more complete discussion of the ethical issues, it can serve as an additional tool for teaching medical ethics to members of the healthcare professions and clinicians. [6]

Materials and Methods:

A cross sectional study was conducted among medical and non-medical professionals across India to assess the bioethics awareness and cognitive opinion regarding bioethics through big screen films. The research was conducted among the medical professional which included dentists, general doctors, nurses and other frontline health care workers, and other non-medical professionals. The cross sectional study was conducted for a period of 3 weeks from 7th November 2019 to 30 November 2019 via online forms in which video clippings along with specifically designed questions comprising of both bioethics awareness related and cognitive opinion related questions were sent across medical and non-medical professionals. About hundreds of South Indian movies have got screen plays which involves bioethical issues, bioethics awareness scenes of which 10 popular clippings from 10 different South Indian films were chosen mainly based on their popularity of the movie scene and the impact which is being anticipated among the viewers. Permission and ethical clearance were obtained from the Department of Public Health Dentistry, SRM Dental College, Ramapuram, Chennai. Considering it a questionnaire – based study, verbal consent was obtained from the participants who took part in this study. The inclusion criteria comprised of all individuals who were whole heartedly interested to take up the questionnaire, medical professionals like general doctors, dentists, nurses, and other frontline health care workers and medical and non-medical professionals above 18 years of age were included in this study and children below 18 years were excluded. A set of 18 closed ended questions along with the video clippings were used for the data collection. A total of 128 responses were received via online platform of which 49 were medical professionals and 79 were non – medical professionals. Statistical analysis was done using SPSS software version 26.0 (SPSS Inc., Illinois, Chicago, USA) and Chi Square test was performed for descriptive analysis regarding Bioethics awareness and Cognitive opinion on bioethics. The results were tabulated.

Results: Figure 1: Distribution of study participants included in the study

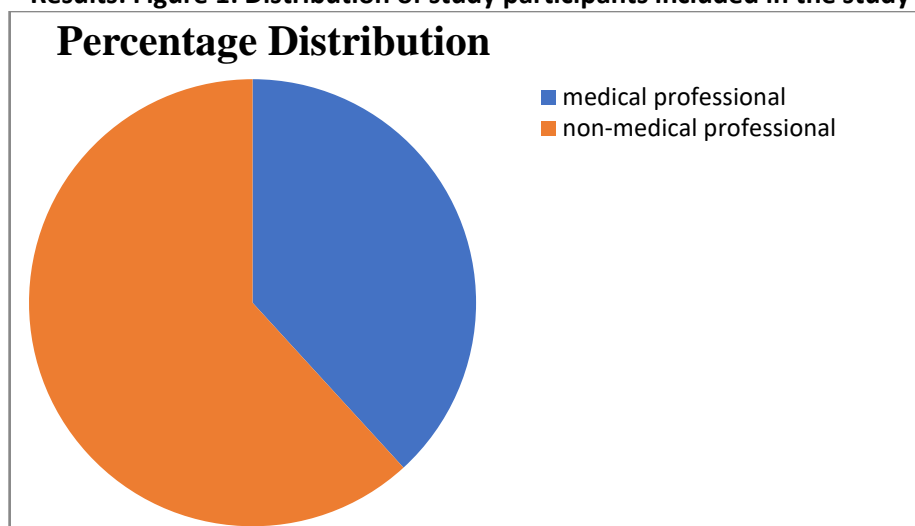


Figure 1 depicts the distribution of study group participants based on Medical Professionals n=49 (38.28%) and non-medical professionals n=79 (61.71%)

Table 1: Descriptive statistics on awareness of bioethics among the medical and non-medical professional

S.no	QUESTIONNAIRE	OPTIONS	Medical professional (n-49)		Non-Medical professional (n-79)	
			Frequency(n)	Percentage (%)	Frequency(n)	Percentage (%)
	Are you aware of any film situation similar to this in day today life	Yes	26	53.1	23	29.1
		No	23	46.9	56	70.9
	Are you aware of the concept of ethical clearance for the drugs which is available in the market	Yes	40	81.6	35	44.3
		No	9	18.4	44	55.7
	Are you aware of the consequences after such an act?	Yes	43	87.8	69	87.3
		No	6	12.2	10	12.7
	Are you aware of any such films seen in real life?	Yes	41	82.7	48	60.8
		No	8	17.3	31	39.2
	Are you aware that hospital will have their own protocols even during emergency situations?	Yes	45	91.8	63	79.7
		No	4	8.2	16	20.3
	Are you aware about these kinds of malpractices?	Yes	34	69.4	29	37.3
		No	15	30.6	50	62.7

Table 1 shows that 53.1% of medical professionals were aware of the films in situation similar to day today life.91.8% of medical professionals had their own protocols in the hospital during emergency situations.79.7% of non-medical professionals had their own protocols in the during emergency situations.

Table 2: Descriptive statistics on cognitive opinion of bioethics among the medical and non-medical professional

S. no	QUESTIONNAIRE	OPTIO NS	Medical professional(n-49)	Non-Medical professional (n-79)
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			Frequency(n)	Percentage (%)	Frequency(n)	Percentage (%)
1	Do you think you will be ready to file against the hospital / the doctor if such a situation occurs?	Yes	48	98.0	63	79.7
		No	1	2.0	16	20.3
2	Do you support his act of helping in the emergency situation in spite of the doctor's mental and physical status	Yes	8	16.3	9	11.4
		No	41	83.7	70	88.6
3	Do you think it is the hospital's fault for encouraging such an act	Yes	40	81.6	64	81.0
		No	9	18.4	15	19.0
4	Do you think the study subjects are informed priorly before the clinical trials?	Yes	21	42.9	39	49.4
		No	28	57.1	40	50.6
5	Do you think every doctor in a corporate sector are ethically sound	Yes	7	14.3	13	16.5
		No	42	85.7	66	83.5
6	Do you think that certain doctors intentionally harm patients for their own benefits	Yes	25	51.0	43	54.4
		No	24	49.0	36	45.6
7	Do you think corruption persist in hospital sector during recruitment of staffs including the deserving ones	Yes	45	91.8	69	87.3
		No	4	6.1	10	12.7
8	Do you think the quality of health care services provided, could be compromised due to such an act?	Yes	36	73.5	60	75.9
		No	13	26.5	19	24.1
9	Do you think	Yes	37	75.5	25	31.6

	practices like this takes place in private hospitals	No	12	24.5	54	68.4
10	Do you support this kind of Non certified or private ambulances	Yes	16	32.7	25	31.6
		No	32	65.3	54	68.4
11	Do you think it is ethical to follow hospital's own protocols for emergency situations	Yes	17	34.7	9	11.4
		No	32	67.3	70	88.6
12	Does all the hospitals have thorough bio-data and proper qualification record about the practitioners and the nurses	Yes	25	51.0	39	49.4
		No	24	49.0	40	50.6

Table 2 shows that 98.0 % of medical professionals were thought that file the case against the hospital or doctor.88.6% of non-medical professionals were not followed the protocols for emergency situations.

Table 3: Chi-square test was performed on awareness of bioethics among the medical and non-medical professional

S.no	QUESTIONAIRRE	P-value
1	Are you aware of any film situation similar to this in day today life?	0.032*
2	Are you aware of the concept of ethical clearance for the drugs that is available in the market?	0.043*
3	Are you aware of the consequences after such an act?	>0.05
4	Are you aware of any such acts till now in real life?	0.034*
5	Are you aware that hospital will have their own protocols even during emergency situations?	>0.05
6	Are you aware about these kinds of malpractices?	0.048*

Table 3 shows that association between the medical and non-medical professionals. Most of them aware of the films situation was similar in day today life, ethical clearance and kind of malpractices were statistically significant.

Table 4: Chi-square test was performed on cognitive opinion of bioethics among the medical and non-medical professional

S.no	QUESTIONNAIRE	P-value
1	Do you think you will be ready to file a law suit against the hospital / the doctor if such a situation occurs?	0.013*
2	Do you support his act of helping in the emergency situation in spite of the doctor's mental and physical status?	0.041*
3	Do you think it is the hospital's fault for encouraging such an act?	>0.05
4	Do you think the study subjects are informed priorily before the clinical trials?	>0.05
5	Do you think every doctor in a corporate sector are ethically sound?	>0.05
6	Do you think that certain doctors intentionally harm patients for their own benefits?	>0.05
7	Do you think corruption persist in hospital sector during recruitment of staffs including the deserving ones?	>0.05
8	Do you think the quality of health care services provided, could be compromised due to such anact?	>0.05
9	Do you think practices like this takes place in private hospitals?	0.038*
10	Do you support this kind of Non certified or private ambulances?	>0.05
11	Do you think it is ethical to follow hospital's own protocols for emergency situations?	>0.05
12	Does all the hospitals have thorough bio-data and proper qualification record about the practitioners and the nurses?	>0.05

Table 4 shows that association between medical professionals and non-medical professionals were thought that file the case against the hospital or doctor, followed the protocols for emergency situations were statistically significant.

DISCUSSION:

Bioethics when viewed from a broader perspective includes not merely the philosophical study of medical ethics, but also comprises of other aspects like medical law, medical anthropology, medical sociology, health politics, health economics rarely medical science itself.^[7] It was extremely crucial for the health care workers to understand and imbibe the principles of bioethics and incorporate those in their day-to-day practice. Physicians come across ethical dilemmas in their everyday practice very frequently^[8] and to overcome these bioethics education and awareness becomes very critical. This would provide the public to raise the questions to their physicians or doctors and to avail the appropriate treatment for them as well. The law as such could be defective morally and moral rights at times doesn't fit into law, or be incorporated only inadequately.^[7,8] Medical ethics was considered higher in hierarchy since it deals with the ethical obligations of doctors to their patients, colleagues and society. At several instances, situations that are considered legal may not necessarily be moral or ethical.^[9] Human rights acts as a crucial tool bridging between these two providing a strong grounding to doctrine within the law for health , and a practical implementation.^[10] Ethics quality are practices

which are ought to be consistent with widely accepted ethical standards, norms, or expectations for a health care organization and its staffs and must comprise of set of organizational mission and values statements, codes of ethics, professional guidelines, consensus statements and position papers, and public and institutional policies.^[11] De Vecchi et al. 2016 suggested that digital storytelling or the use of virtual/ electronic media to tell patient stories as a promising way of showcasing patient experiences had proven to be used as an effective tool in teaching health care professionals.^[3] Considering that the visual media had a greater impact on the viewers, and it was used as an effective tool in teaching bioethics for both the health care professionals and the public, the cross-sectional study was conducted across medical and non-medical professionals to assess the bioethics awareness through big screen films.

The first video clipping selected was from a south Indian film in the Tamil language which depicts a scene where the hospital doctors and staffs were pretended a dead patient to be alive by using an artificial respirator or ventilator for their personal reasons to generate revenue and by mere political pressure. The questions were asked pertaining to this clipping were aware of film situation similar to this in day today life and thought that file a law against the hospital / the doctor if such a situation occur? Out of the 128 responses received, medical professionals 46.9% said No and 53.1% said yes and they are aware of such a situation and non-medical professionals 70.9% said no and only 29.1% said yes and thus very few of public or non-medical persons are only aware that such situations do occur in day to day life.^[12] This case study remains as an example that such acts of violations of bioethical principles such as Autonomy, beneficence, non-maleficence and justice occurred in day-to-day life. To overcome these errors in the health care system the non – medical professionals must be aware of their human rights, and the bioethics principle such as informed consent, and must be ready to raise doubts and questions to their doctors to avail the appropriate treatment.

The second video clipping from a popular Telugu film, which depicts a scene where a renowned surgeon who was very efficient conducts an emergency orthopedic surgery verbally instructing the junior doctors and staffs for a trauma case since he was completely drunk and was a chronic alcoholic. Though it was a successful surgery and the patient was out of danger, the surgeon in the movie accused and reported to the Medical council for termination of his medical practice license. The questions regarding this clip were a) Do you support his act of helping in the emergency situation in spite of the doctor's mental and physical status? b) Do you think it is the hospital's fault for encouraging such an act? Since it is very obvious that a doctor who was not sane and disturbed physical and mental status could put the patient in danger when he or she tries to carry out procedures, the results from both the medical professionals (n=49; 16.3% Yes; 83.7% No) and non- medical professionals (n=79; 11.4% Yes; 88.6 % No) were against such an act. Looking at this act from a humanitarian perspective, yes saving a person's life at any situation is prioritised first, but at the same time it is extremely important to weigh the dangerous consequences of such an act too.

Thomas et al 2012 reported that surgeon performed a spinal surgery in a women, who files law against the doctor for committed error in the surgery and also claimed that the doctor was drunk while performed the surgery.^[13] The scenario was an apt example where the doctor breached the principle of Non maleficence which was the fundamental for all the bio ethics principles "DO NO HARM".^[14]

Third video clipping was from a Tamil film, which depicts a scene where indigenous drugs are exported abroad from our country and illegal clinical trials for drugs were carried out in children below the age of 18 without prior knowledge and consent. Two questions each from the awareness and cognitive opinion point of view were asked. a) Are you aware of the concept of Ethical clearance that has to be done before the drugs are marketed? b) Do you think the study subjects are informed priory before the clinical trials? As expected, predominantly medical professionals (n=49; 81.6% Yes; 18.4% No) were aware of the concept of ethical clearance and only less than half of the non – medical professionals (n=79 44.3% Yes; 55.7% No) were aware of any situations.

Lokesh P Nijhwan et al suggested that inevitable requirement before each and every research which involved human being as subjects for study to procure Informed Consent.^[15]

The fourth video clipping was a snippet from a Tamil movie which depicts illegal organ transplantation that took in private hospitals and common public tried to earn money through that mode. 'Do you think every doctor in the corporate sector are ethically sound?' was the question were asked pertained to that video clip. Gawronska et al 2019 suggested that though illegal organ removal was not a new crime, globalisation and inequality in the economy, organ shortages have expanded this issue to such an extent that around the globe governments were now advocated to take severe disciplinary measures and actions. Illegal organ

transplantations are considered criminal offences were under domestic transplant legislations and the framework of human trafficking. [16]

The fifth clipping was a Tamil film in which scene showed a doctor cutting his own patient's ventilator connection as a revenge for his personal vengeance. The participants were questioned about their opinion regarding such an act by the following question 'Do you think that certain doctors intentionally harm patients for their own benefits? The second question was regarding their awareness, whether they were aware of consequences of such an act? The well-known history of the English doctor Harold Shipman who killed approximately 15 patients while worked as a junior hospital doctor in the 1970s, and another 235 or so worked subsequently as a general practitioner is an example for the breach of fundamental bioethics of Non maleficence. [17]

The sixth snippet showed a screen play where a chief doctor indulges himself in bribing in the process of recruited health care workers and staffs. The following two questions were asked pertaining to this video. a) Do you think corruption persist in hospital sector during recruitment of staffs including the deserving ones? b) Do you think the quality of health care services provided, could be compromised due to such an act? corruption does exists in the recruitment of staffs in private hospital sectors. Question was raised that the quality of health care services provided could be compromised due to such an act? Corruption in Human Resources for Health (HRH) had a concern in developed a global health sector because of its detrimental effect on quality of healthcare and for the public to access, which certainly has its own negative impact on morbidity and mortality of the patients. Corruption also exists while assigning postings and transfer decisions, which negatively affects health service delivery and population outcomes. [18]

The seventh video clip from Tamil film in which a doctor carelessly places her own watch inside the patient's stomach while performed a surgery. The first question regarding this clipping was 'Do you think practices like this take place in private hospitals?' for which the responses between the groups were largely differed. The next question linked to that video clip was whether they were aware of any such acts till now in real life? Any foreign object left within a patient had high potential to create the serious problems included the life-threatening infections. The most common items that were left behind are gauze, cotton, piece of gloves, needles, blades, surgical instruments. [19] In dentistry, at times broken instruments like root canal files are best not retrieved because the action of removal of the broken instrument will cause more harm than good. [20] Ethically sound doctors, surgeons or the medical professionals were certainly informed the patients about the error during the surgery, and the error would not be masked.

The eighth movie clip was again from a Tamil movie in which illegal private ambulances will be used to admitted the patients deliberately to brain dead condition to procure them for organ trafficking. 'Do you support these kinds of non-certified ambulances?' was the question given regarding this clip. It must be due to mere innocence or negligence that few of them were accepted to opt for non-certified ambulances during emergency situations. The vienna forum to fight human trafficking 2008 suggested that intense involvement of doctors and health-care practitioners, ambulance drivers and mortuary workers in organ trafficking in apart from those who were involved in other human trafficking networks. [21]

The last but one clipping was from a Tamil movie which depicts a scene where a mother brings her son to a private hospital who attempted for suicide, and the management of the hospitals denies to start the treatment immediately and instead it demands few admission protocols. The questions with regards to this scenario were a) Are you aware that hospital will have their own protocols even during emergency situations? The hospital services were organised into three parallel streams of care interdependent of each other which must involved a division for emergency services, elective and out patients separately. [22]

The last video clipping was again from a Tamil film which depicts a scene where a guy dressed himself as a Female Staff nurse and worked in the hospital for his own personal reasons. The questions pertaining to this clipping were a) Are you aware of these kinds of malpractices? b) Does all the hospitals have thorough bio data and proper qualification record about the practitioners and staff nurses?

It was considered a punishable offense and crime, if any medical assistant or any common man impersonates themselves as a nurse or as any other frontline workers. Medical assistants who were impersonated themselves as nurses could be held legally responsible for practicing nursing without a license and can be penalised similar to how a physician held legally responsible for practicing medicine without a license. [23]

CONCLUSION:

Bioethics and health care services must be beneficial for both the healthcare workers and the public. The education system from schools to medical colleges must involve the Bioethics as curriculum so that both the public will know their rights to procure appropriate treatments and also medical professionals can handle ethical dilemmas in their day-to-day practice in an easier way. From the plethora of methods and platforms available to teach bioethics in a practical way, Cinema also called the big screen films was an ideal tool and platform to educate public on bioethics awareness since it had really got greater impact on its viewers.

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