



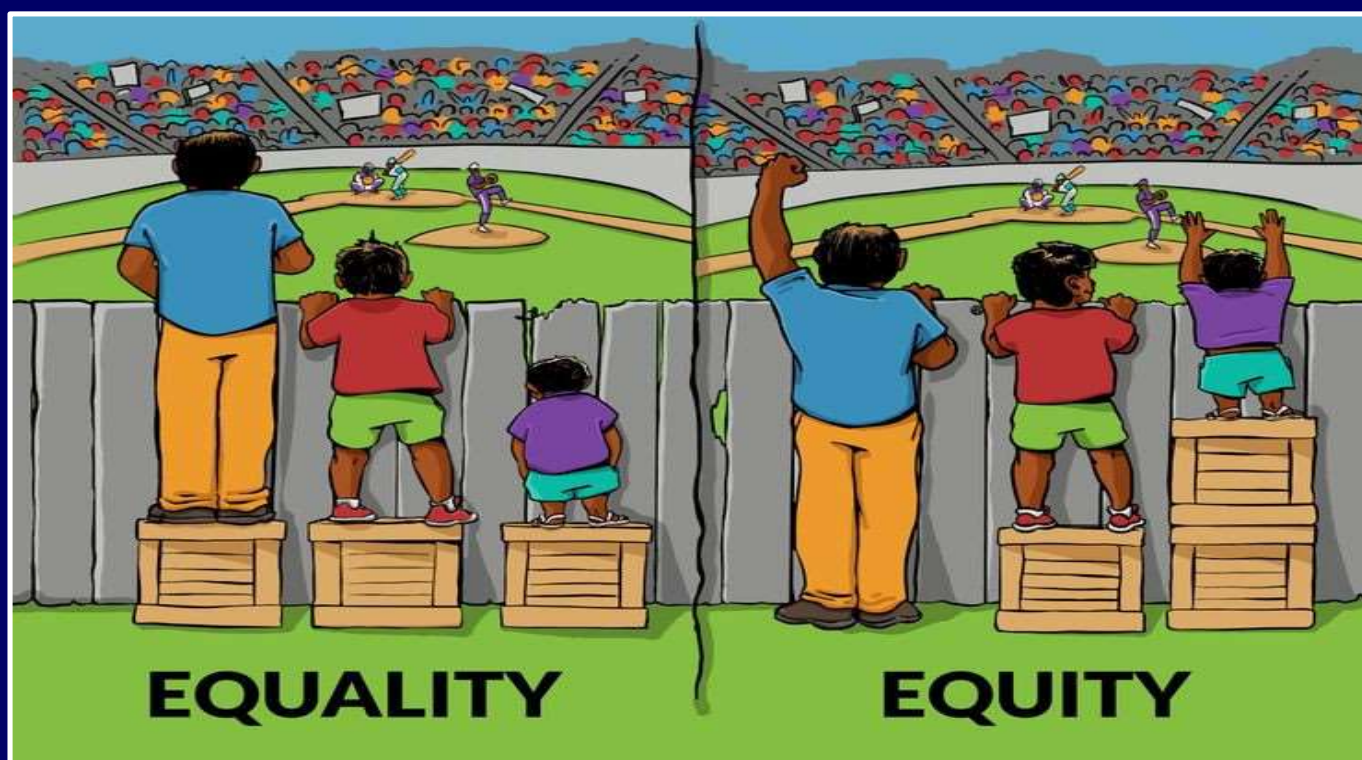
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Editorial

Prejudice, Discrimination and Racism – an ethical viewpoint

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Prejudice, Discrimination and Racism are important concepts from the point of view of both social psychology and bioethics. The following editorial looks at these constructs from a deeper and ethical perspective.

The General Conference of the United Nations Educational, Scientific and Cultural Organization, meeting at Paris at its twentieth session, from 24 October to 28 November 1978. Whereas it is stated in the Preamble to the Constitution of UNESCO, adopted on 16 November 1945, that "the great and terrible war which has now ended was a war made possible by the denial of the democratic principles of the dignity, equality and mutual respect of men, and by the propagation, in their place, through ignorance and prejudice, of the doctrine of the inequality of men and races", and whereas, according to Article 1 of the said Constitution, the purpose of UNESCO "is to contribute to peace and security by promoting collaboration among the nations through education, science and culture in order to further universal respect for justice, for the rule of law and for the human rights and fundamental freedoms which are affirmed for the peoples of the world, without distinction of race, sex, language or religion, by the Charter of the United Nations" [1].

Recognizing that, more than three decades after the founding of UNESCO, these principles are just as significant as they were when they were embodied in its Constitution.

The Declaration follows the structure of the Universal Declaration of Human Rights, with a preamble followed by eleven articles viz [1].

Article 1 declares that discrimination on the basis of race, color or ethnicity is "an offence to human dignity" and condemns it as a violation of the principles underlying the United Nations Charter, a violation of human rights and a threat to peace and security [1].

Article 2 calls on states, institutions, groups and individuals not to discriminate on the basis of race in human rights. It calls on states to end support for discrimination, and to take affirmative action where necessary to correct it.

Article 3 calls for particular efforts to end racial discrimination in civil rights, housing, employment, education, and calls for everyone to have free access to public places and services regardless of race.

Article 4 calls on states to review policies and repeal laws which discriminate on the basis of race.

Article 5 calls for an end to racial segregation and apartheid.

Article 6 calls for an end to racial discrimination in political rights, in particular the right to vote and stand for public office.

Article 7 declares that everyone has the right to equality before the law and to equal justice before the law regardless of race. It calls for everyone to have an effective remedy, enforceable through the courts, for harm suffered through racial discrimination.

Article 8 calls for education to promote tolerance and racial understanding.

Article 9 condemns propaganda and organizations based on the idea of racial supremacism. It calls for incitements to racial violence, or hate speech to be criminalized, and for racist organizations to be outlawed.

Article 10 calls on the United Nations to study the causes of racial discrimination so as to better combat it.

Article 11 calls on every state to promote respect of fundamental human rights and the principles of this declaration and the Universal Declaration of Human Rights (UDHR).

As a declaration rather than a treaty, the document is non-binding.

Definitions of key terms

- **Prejudice:** Prejudice is an unjustified or incorrect attitude (usually negative) towards an individual based solely on the individual's membership of a social group. For example, a person may hold prejudiced views towards a certain race or gender etc. (e.g. sexist) [2].
- **Discrimination:** Discrimination is the behavior or actions, usually negative, towards an individual or group of people, especially on the basis of sex/race/social class, etc. The relationship between prejudice and racial discrimination is suggested to be 'circular'; meaning one leads to the other [3].

Prejudice refers to thoughts and attitudes a person holds toward a group of people while Discrimination refers to actual actions against such a group. Anti-discrimination laws exist to prevent discriminatory actions against any group of people. A prejudiced person may not act on their attitude. Therefore, someone can be prejudiced towards a certain group but not discriminate against them. Prejudice includes all three components of an attitude (affective, behavioral and cognitive) while Discrimination just involves behaviour [4].

Our prejudices and discriminations are shaped by our attitudes. Attitudes are shaped by the ABC triad theory which is made up of the following – [5]

Affective component: this involves a person's feelings / emotions about the attitude object. For example: "I am scared of spiders".

Behavioral (or conative) component: the way the attitude we have influences on how we act or behave. For example: "I will avoid spiders and scream if I see one".

Cognitive component: this involves a person's belief / knowledge about an attitude object. For example: "I believe spiders are dangerous".

One of the underlying assumptions about the link between attitudes and behavior is that of consistency. This means that we often or usually expect the behavior of a person to be consistent with the attitudes that they hold. This is called the principle of consistency. The Principle of Consistency reflects the idea that people are rational and attempt to behave rationally at all times and that a person's behaviour should be consistent with their attitude(s).

Authoritarian Personality and Prejudice

Adorno and others proposed that prejudice is the result of an individual's personality type. They piloted and developed a questionnaire, which they called the F-scale (F for fascism). Adorno argued that deep-seated personality traits predisposed some individuals to be highly sensitive to totalitarian and antidemocratic ideas. Therefore, they were prone to be highly prejudicial [6].

Clinical studies indicated that individuals with a very strict upbringing by critical and harsh parents were most likely to develop an authoritarian personality. Adorno believed that this was because the individual in question was not able to express hostility towards their parents (for being strict and critical). Consequently, the person would then displace this aggression / hostility onto safer targets, namely those who are weaker, such as ethnic minorities. These personalities were hostile to those who are of inferior status, but obedient to people with high status and were fairly rigid in their opinions and beliefs. They were conventional and upheld traditional values. Adorno concluded that people with authoritarian personalities were more likely to categorize people into "us" and "them" groups, seeing their own group as superior [6].

Realistic Conflict Theory and Prejudice

Muzafer Sherif is a famous social psychologist important to the psychological understanding of groups and its members. His main contribution is known as Realistic Conflict Theory, and accounts for group conflict, negative prejudices, and stereotypes as being the result of competition

between groups for desired resources. Sherif validated his theory in one his most famous experiments, The Robber's Cave [7].

In the Robbers Cave field experiment, 22 white, 11-year-old boys were sent to a special remote summer camp in Oklahoma, Robbers Cave State Park. The boys developed an attachment to their groups throughout the first week of the camp by doing various activities together like hiking, swimming, etc. The boys chose names for their groups, The Eagles and The Rattlers. During a four-day series of competitions between the groups prejudice began to become apparent between the two groups (both physical and verbal). During the subsequent two-day cooling off period, the boys listed features of the two groups. The boys tended to characterize their own in-group in very favorable terms, and the other out-group in very unfavorable terms. Sherif then attempted to reduce the prejudice, or inter-group conflict, shown by each group. However, simply increasing the contact of the two groups only made the situation worse. Alternatively forcing the groups to work together to reach common goals, eased prejudice and tension among the groups. This experiment confirmed Sherif's realistic conflict theory (also called realistic group conflict theory), the idea that group conflict can result from competition over resources [7].

The simplest explanation for this conflict is competition. Assign strangers to groups, throw the groups into competition, stir the pot, and soon there is conflict. There is a lot of evidence that when people compete for scarce resources (e.g. jobs, land etc.) there is a rise in hostility between groups.

A stereotype is a fixed, over generalized belief about a particular group or class of people. For example, a "hells angel" biker dresses in leather. One advantage of a stereotype is that it enables us to respond rapidly to situations because we may have had a similar experience before. One disadvantage is that it makes us ignore differences between individuals; therefore, we think things about people that might not be true (i.e. make over generalizations) [8].

Tajfel proposed that the groups (e.g. social class, family, football team etc.) which people belonged to were an important source of pride and self-esteem. Groups give a sense of social identity: a sense of belonging to the social world. People divided the world into "them" and "us" based through a process of social categorization (i.e. we put people into social groups). Henri Tajfel proposed that stereotyping (i.e. putting people into groups and categories) is based on a normal cognitive process: the tendency to group things together. In doing so we tend to exaggerate – [9]

1. The differences between groups
2. The similarities of things in the same group.

This is known as in-group (us) and out-group (them). The central hypothesis of social identity theory is that group members of an in-group will seek to find negative aspects of an out-group, thus enhancing their self-image.

Stereotyping goes hand in hand with Prejudice. When we stereotype people, we attribute a series of traits to them based on the one trait that signals their membership in a particular group. Common contemporary stereotypes are that Asians are hardworking and studious, Hispanics are macho, and that librarians are introverts. By definition, stereotypes are limiting and disregard people's individuality. They also lend themselves to negative and derogatory assumptions. When that happens the stereotype blends into prejudice [10].

The tendency to classify one's experience into categories is a fundamental and universal aspect of human cognition. We create concepts in order to make sense of the endless complexity we encounter in our environment. This is a necessary part of human thought, allowing for processing information efficiently and quickly. In social categorization, we place people into categories. People also reflexively distinguish members of in-groups (groups of which the subject is a member) from members of out-groups. Furthermore, people tend to evaluate out-groups more negatively than in-groups. In this way, Social Categories easily lend themselves to stereotypes in general and to Negative stereotypes in particular [11].

Racism

As prejudice and racism have caused enormous suffering across history, it is very important to try to understand how they work. Prejudice and racism both refer to a negative view of one group of people based solely on their membership in that group. Racism is a specific form of prejudice,

involving prejudicial attitudes or behavior towards members of an ethnic group. The definition of race is somewhat variable but commonly refers to an ethnic group originating on a specific continent, such as people of African, European, or Asian descent [12].

Reducing Social Prejudice

Gordon Allport introduced the intergroup-contact hypothesis. Intergroup contact under positive conditions can reduce social prejudice. The necessary conditions include cooperation towards shared goals, equal status between groups, and the support of local authorities and cultural norms. Research has supported these ideas. In a 2003 review, Stephen Wright and Donald Taylor noted the effectiveness of identification with a super-ordinate group. Different groups can come together as part of one overarching group - example Being as part of one community or of a common humanity. Positive emotional experiences with members of different groups can also reduce negative stereotypes. Having close friends from different groups is especially effective [13].

There may be several reasons for this – [14]

First, it is near impossible to hold onto a simplistic, negative stereotype of someone you know well. Secondly, a close relationship promotes identification with the other person and of the groups they belong to. The conclusion is that your relationships with other people become part of who you are. This is referred to as including the other in the self, a notion introduced by Stephen Wright and colleagues.

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Review Paper

A Critique of Living Altruistic Organ Donation

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ABSTRACT

Living altruistic organ donation is a “consensual” donation of an organ. The failure to secure sufficient number of cadaveric organs has led to a noticeable increase in live organ donation. Living altruistic organ donation is good yet, insufficient to close the gap between the demand and supply of organ. Using the method of philosophical analysis, the paper contends that Living altruistic organ donation seems heroic because of the risks associated with living organ donations. We suggest that common good of the deceased organs be inserted into the organ pool, to cushion the effect of the organ shortages.

Keywords: living altruistic organ donation, organ crisis, informed consent, minor organ donation, organ donor pool, common good, posthumous organ donation.

Introduction

Living altruistic organ donation could be defined as a “consensual” donation of an organ. It is a process whereby an individual donates an organ to a recipient, with whom the donor has no genetic or emotional relationship while still alive [1]. “The failure to secure sufficient numbers of cadaveric organ donations has led to a noticeable increase in live donation of certain organs such as kidneys, as well as lung and liver lobes” [2]. Living altruistic organ donation is an “empathy, and empathy involves the feelings of sympathy and a desire to relieve another's suffering” [3]. In Nigeria, Human organs are mostly obtained from deceased persons for the purpose of transplantation or treatment, or medical or dental training or research [4]. In Iran for instance, living altruistic organ donation was made legal in year 1988 in order to close the gap between the demand and supply of organs. In support of this method, the Iranian government, regulated and funded the transplantation process and compensated the donors for their organ [5]. The question is, what would be the donors’ intention as living altruistic organ donors? Do living altruistic organ donors consider the health or psychological implications of living altruistic organ donation? Can we see living altruistic organ donation as morally justified? However, upon reflection of donor’s psychosocial intention, one could say that it is intimately linked to factors that are historically served, such as family ties, incentives or moral motivations. Osebor asserts that organ donors may value promotion in the workplace or a pay raise, whereas others may prefer additional vacation days, improved insurance benefits, day care, or eldercare facilities, these of course would motivate potential organ donors [6].

This paper is concerned with a philosophical investigation of living altruistic organ donation. The paper further presents a practical reasoning of the common good. The common good

encompasses citizens of a moral community to participate for the expansion of the organ donation pool. The common good is a communitarian approach to organ donation. In this sense, all citizens are potential organ donors and recipients. First let us begin with living altruistic organ donation.

Living altruistic organ donation

There are many methods of organ donation; xenotransplantation, presume consent or mandated choice. Xeno transplantation is the transplantation, or infusion into a human live cells or organs from a nonhuman species [7]. Osebor cites the World Health Organization (WHO) that “presumed consent” is a system that permits ‘material’ to be remove from the body of a deceased person for transplantation. However, if objection is filed, the informed party report is presented. In this case, the deceased definitely voiced an objection to donation presumed by approach [7]. But Living altruistic organ donation is increasingly established procedure to treat patients suffering from organ failure. Although, transplant surgeons, would welcome altruistic living organ donation. The living organ donation seems controversial because of the need to choose by the donors. Although, living altruistic organ donation requires explicit consent of the donor. The bioethics principle of “do no harm” entails that clinician must ensure the safety and the well-being of the actual organ donor and the recipient. G R Dunstan holds that,

“The medical duty is to give the information necessary for patients to understand the procedures, and to see what can be foretold of their outcomes for themselves and others; and to give it in a manner and relationship most favorable to its assimilation, free of coercion, over-persuasion, deception and improper inducement. Patients and donors are under a duty of full disclosure of all that is relevant to clinical and ethical judgment. Trust must be mutual; ethics is not for doctors’ alone [8].”

Organ harvesting from living donors can be safely performed for the donor and the transplant recipient. But the concern of bioethicists is the protection and well-being of the actual organ donors. This prompted the transplantation community to develop a consensus statement emphasizing that a living donor should be competent, willing to donate an organ, and free of coercion [9]. The risk-benefit ratio of organ procurement should be evaluated to enhance fairness, informed consent, integrity, and dignity of the human person. Kanmani Job and others hold that the most important factor in organ donation is to maximize the psychological status and well-being of the donors before and after transplantation; and this has become the foremost goal of all transplantation centres [10]. The ethical issues that are mainly concerned with living organ donation include prevention of psychological harm, ensuring the donors are fully informed, and have decided to donate without coercion.

An Evaluation of living altruistic organ donation

Living altruistic organ donation is critical because it requires donors and medical practitioners to adhere to all the principles of organ donations, before any surgical operation could be carried-out on the organ donor. Living organ donation is a unique source of organ to saving candidates on the organ waiting list. Abubarkar and others hold that –

“Most living - donor renal transplants are between genetically related individuals. Living – donor transplantation between genetically unrelated individual give better results than well - matched cadaveric allografts [11].”

However, living altruistic organ donation from a minor is illegal in Nigeria. The National Health Act 2014 reports that “a person shall not remove tissue which is not replaceable by natural processes from a person younger than 18 years” [4]. In this sense, it is uncommon for minors to be accepted as donors in Nigeria. Kidney Health Australia (KHA) Reports that “children under 16 years cannot be registered on the Australian Organ Donor Register. They can be registered as ‘intent’ until they are 18 years old, though legal consent is sought from their parents or legal guardians when they are under 18. If you are under 18, or have children, discuss donation so your family is prepared if they need to make a decision” [12]. Altruistic living organ donation requires an explicit consent of the donor and must be selfless and rational.

Living Altruistic organ donation may be between family members or someone whom the donor is not related. Donor evaluation is another important aspect of living altruistic organ donation. The

potential actual donor has the right to understand all the principles of organ donation, which must be written or oral and must be interpreted in a language, which the donors understand best. The potential living altruistic organ donors are subjected to different standardized tests, for psychological assessment, psychosocial suitability, commitment, motivation and follow up is needed by care givers. In India, 21 candidates were considered to be potential donors after passing the stringent criteria. All potential donors had a spiritual belief system and were truly altruistic this proves that about 50% of altruistic donors, if they had ulterior motives, the donation would not be altruistic by definition [13]. The above figure however, include the very first case of a living organ donor, who gives a part of his liver to someone whom he had never met. Organ donation in this sense is altruistically done to save the life of a dying human being. [13].

Living Altruistic organ donation has been over blown by emotions. Charity provides that there is a limited complication to the donor and that altruistic living organ donation can be distinguished between parts of the body, such as the regenerating part like blood and bone marrow. Those parts which do not regenerate such as, the paired like kidneys, corneas and lungs, and unpaired like the heart. Dunstan argues that

“With transplantation from living donors the notion of ‘donation’, ‘gift’, becomes a reality: a willed, conscious gift. It extends from the giving of expendable or renewable resources like blood, bone marrow and neural stem cells, to paired organs, kidneys, and to segments of single organs, liver, spleen and lung. It can save lives, and improve the quality of lives; and so it can exert its emotional appeal directly on the potential donor [8].”

To some moral philosophers, living altruistic organ donation is exemplified by unconditional love because it is an attempt to put one's life on the risk to save another. However, despite efforts by governments at all levels to increase organ donation, organ crisis persists. Where is the unconditional love? Where is the charity? If thousands of patients still die on the organ waiting list. Kanmani Job cites the U.S Department of Health and Human Services that more than 1,23,000 patients currently need an organ transplant in the US and the numbers continue to increase every day [10].

Regrettably, we don't see living organ donations as totally altruistic because of its choice effects. Researchers assert that within the donor population, the likelihood of post-donation chronic renal failure and medical comorbidity such as hypertension and diabetes appear to be relatively higher among some donor [14]. Living organ donations amounts to putting the actual organ donors' life at risk for the survival of another. In this case, we argue that living altruistic organ donation is heroic. David Z. Levine cites Dr Francis Moore nearly 35 years ago:

“Thus, for the first time in the history of medicine a procedure is being adopted in which a perfectly healthy person is injured permanently in order to improve the well-being not of himself, but of another. Some laboratories have viewed this matter with such misgivings that under no circumstances have they used tissues from volunteer human donors” [15].

Marie-Chantal Fortin and others argue that wanting to donate one's heart while still alive, or donating a portion of one's lung or liver would not qualify as altruistic intentions or acts because it would involve sacrificing or risking one's life in order to contribute to another person [16]. Researchers hold that Catholic theologians say that to mutilate one living person to benefit another violates the principles of human dignity [11]. We content that there are three situations which we do not consider as altruistic acts; (1) Helping someone while harming oneself (2) Dying for a cause (3) Neglecting loved ones in order to bail out strangers. The value of individual life is worthy and should be safeguarded from any kind of harm. Donating organs, while still alive, in our opinion is an act of inviting harm to oneself.

The Nuffield Council on Bioethics (2006) reports on "sanctity of life". The sanctity of life means all humans are of equal (and possibly absolute value) [17]. Nicola Jane Williams argues that transplant surgeons are uncomfortable with living organ donation; “they were expressing the hope that in the future the need to resort to living donors would be made obsolete as organs obtained solely from cadavers could be used with a high expectation of survival” [18].

Upon reflection of living altruistic organ donation, we submit that the continued reliance on living altruistic organ donors for the expansion of the organ pool would lead to more organ transplant commercialism world-wide. We argue that common good be integrated into the organ donor pool. The question is, how do we access the common good?

The Common Good for Organ Donation

The Catholic religious tradition, which has a long history of struggling to define and promote the common good, defines it as "the sum of those conditions of social life which allow social groups and their individual members relatively thorough and ready access to their own fulfillment" [19]. The common good incorporates certain basic requirements of social justice, as citizens must provide one another with basic rights and freedoms and they must not exploit each other. But the common good goes beyond the basic requirements of justice because it requires citizens to maintain certain patterns of conduct on the grounds that these patterns serve certain common interests [20]. Amitai Etzioni cited Cicero that a "people" or "republic" as "not any collection of human beings brought together in any sort of way, but an assemblage of people in large numbers associated in agreement with respect to justice and a partnership for the common good" [21]. The "common good" refers to those facilities—whether material, cultural or institutional—that the members of a community provide to all members in order to fulfil a relational obligation they all have to care for certain interests that they have in common [20]. In fulfilment of rational obligations, all the citizens of a moral community are encouraged to register as a posthumous organ donor in order to save fellow citizens dying on the organ waiting list. The common good for organ donation requires the explicit consent of donors to register for the expansion of organ donation pool upon their death. In this case, every citizen is a potential donor and potential recipient. We contend that the common good for organ donation is a virtue of the fact that the citizens stands in a relationship between on another.

Concluding Reflections

The collective philosophy, which opines that all citizens benefit from the common good, receives numerous obstacles that hinder its implementations. First, according to some philosophers, the very idea of a common good is inconsistent with a pluralistic society. Different people have different worldviews about organ donations. Given this difference, it will be impossible for us to agree on a common good for organ donations.

The second problem encountered by attempts to promote the common good is that of individualism. Historically, traditions are not known for individualism. Today, globalization is worldwide. Without mincing words, individualism is the order of the day. A moral/political community is polarized with separate individuals who are free (within the limit of the law) to pursue their own individual goals and interests, without interference from others or the state. Ogechukwu and others argue that we have always been skeptical of the benefits of globalization. Generally, most commentators on globalization argue that continents have not benefited from the process of globalization and that it has actually exacerbated the problem of poverty in the world. In fact, some of them blame globalization for practically all that is wrong in the world [22].

The above obstacles to the ethics of the common good are not enough to dismiss the common good for organ donation. The common good theory would lead us to ask questions like; what kind of society do we want to leave behind? "No doubt," and what follows, with the global perception of African societies seems to be one of communalism, not individualism. Ogechukwu argued that globalization, as a double-edged sword, has impacted both positively and negatively on cultures to the extent that one cannot convincingly prove that its net effect is negative and to state also that the negative effects came as result of copying what was wrong in foreign cultures of their own freewill [22]. Therefore, common good ethics would make us to view ourselves as members of the same community and, while respecting and valuing the freedom of individuals to pursue their own goals, to recognize and further those goals we share in common for the common good of our society.

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Bioethical Dilemmas in Dentistry in the COVID-19 Era

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ABSTRACT

The World Health Organization has designated COVID-19 as a Pandemic. Healthcare providers have a sacred duty to educate patients about these risks and to ensure that the guidelines provided by the governing body guide them in preventing the virus from spreading. A dentist must follow basic bioethical principles such as benevolence, autonomy, causing no harm, and justice in order to instill the patient-doctor trust and to have healthy clinical practice. It should be emphasized that the use of these principles is of extreme importance in facing the ethical issues especially during the novel corona virus pandemic.

Keywords: bioethics, dentistry, COVID-19, novel corona virus, dentist.

Introduction

As the novel corona virus (COVID-19) pandemic continues to spread around the world, it poses increasing challenges for human survival nationally and globally. It is the most serious public health challenge faced by India today, with implications beyond the health sector, including socio-economic discrimination.

What is Bioethics?

Ethics is a moral principle or virtue that governs the character and behavior of individuals or groups. As a branch of philosophy and theology, it is a methodical study of rightness and goodness related to character and behaviour [1]. According to UNESCO Bioethics can be defined as the systematic, pluralistic and interdisciplinary study involving the theoretical and practical moral issues raised by the life sciences and humanity's relationship with the biosphere [2].

Bioethics can be explained according to the following principles:-

- **Patient Autonomy (self-governance):** According to this principle, the primary duty of dentists is to enable patients to participate in treatment decisions in a meaningful way, while giving due consideration to the needs, desires and skills of patients as well as protecting the privacy of patients [3].
- **Non -Maleficence (do no harm):** This principle explains the need for professionals to protect patients from harm. According to this principle, the main responsibility of the dentist is to keep the knowledge and skills up-to-date, know when and where to ask the expert or another expert for help. It is recommended to entrust patient care to an auxiliary institution [3].
- **Beneficence (do good):** This principle explains the concept that professionals must act for the benefit of others. According to this principle, the first duty of a dentist is to serve patients. The most important aspect of this obligation is to provide dental care promptly and competently [3].
- **Justice (fairness):** This principle represents the concept that experts are responsible for fair dealing with patients, colleagues and society. According to this principle, the primary duties of dentists include fair treatment of patients without prejudice. In the broadest sense of the word, this principle expresses the concept that dental professionals should actively seek local colleagues for specific activities to help improve healthcare for all [3].

Areas of Concern

Consent form

The nature of informed consent does not only mean that patients are expected to sign a contract that confirms that they can receive treatment, but also to provide them with a fair and balanced assessment of the treatment. In current situation a separate screening form should be made mandatory along with the consent form, detailing the current symptoms of the patients with their travel history. Temperature with sensor thermometers maybe used to record patient temperature to verify.

Confidentiality

It is important to appreciate the unique position of trust that a practitioner is placed in by virtue of the doctor- patient relationship. It is precisely this trust that gives rise to the belief on the part of the patient that the practitioner will uphold, as a private fiduciary, all voluntary promises, commitments, and oaths whether implied or explicitly made. However, a dentist should follow the national law vis-a-vis sharing of information of suspect patients only with the government agencies.

Fees

Rising cost of health care can limit patient access to health care, limited resources can lead to rationing and delaying, and denial of care to people in need [4]. Especially in Covid-19 times when the doctors have to invest more in the equipment like PPE and amplified sterilization measure, this escalating cost can lead to inverse care law. Appropriate correction in fees maybe carefully implemented in clinics for the best outcome.

Emergency care

Dental clinics invariably carry the risk of novel coronavirus infection because of the inherent nature of procedures performed. This is the reason that the regulatory bodies have advised the dentists to only tend to emergency care. In case the individual has trouble eating or is experiencing other discomforts that may lead complete disruption of normal routine, such patients should also be considered under emergency care.

Quality of care

Dentist need to provide good quality care to patients to justify the faith with which patient has approached the dentist [5]. Fully documented and complete information regarding patient's treatment must be shared with the patient. The quality of care should not interfere with the current situation of scarcity in protective aids and amplified workload of strict sterilization measures.

Sterilization

Due to the inherent nature of the procedures performed, dental clinicians are always at risk of contracting novel coronavirus. It is advised to follow strict sterilization protocols in the dental clinic including disinfection in the reception or patient waiting area. It is suggested that appropriate steps are taken before and after the patient leaves the clinic according to the Standard Operating Protocols depending on set up, geographical location and supplemental laws of the area.

Waste management

As the clinics have been following proper sterilization protocols, it is more crucial to follow even stricter measures for biomedical waste disposal system because 'you can heal what you see, but you can't heal what you can't see'. Proper downing and doughing steps should be used. The process is easily accessible on government websites.

Proper knowledge

The present scenario overemphasizes the knowledge and skill while least importance is given to the clinical ethics, which is the heart of healthcare training. Being unaware of appropriate Covid-19 protocols, one can endanger the whole community around. It maybe advised to assimilate proper knowledge through WHO online courses.

Cannot refuse a patient

A dentist cannot refuse or discriminate against a Covid-19 positive patient. Under the principle of 'Justice', the dentist's primary obligations include dealing with people justly and delivering dental care without prejudice.

Online consultancy

While social distancing is in effect, most of dentists have been advised to shut down their setups and tend only to emergency care. Although there are patients who do not fall under the category of emergency care but still need immediate pharmacological intervention. Therefore, some of the professionals have opted for online consultancy, such patients must be tele-counselled and should be scheduled for when regular dental services are restored by the time everything gets as usual. Prescribing medicines over telephonic conversations has been inappropriate. In current situation charging online fees for the same is also debatable.

Hospital consultation

Consultation is common practice when it comes to health care sector. If a dentist is not fully equipped according to the protocols of Covid-19, he/she advised to consult a hospital for the emergency procedures to be carried out.

Advertising

Advertising is still a debatable subject when it comes to bioethics, but it may be preferred that if a clinic is well equipped with all the protective aids for Covid-19, it can announce its compliancy to help the patients in the need of emergency dental treatment.

Minimum possible attendants

While social distancing is a major preventive measure against the spread of novel corona virus, it is preferred that minimum possible attendants should accompany the patients into the clinic. It is

also advised to avoid clustering of attendants in the waiting area by giving a substantial time lag in between the appointments.

Distribution of protective aid

Shortage of hand sanitizers and masks has become a problem around the globe. However, a dental professional cannot charge or take any kind of favour in lieu of giving such aids to the people working within the clinic or the patients.

Conclusions

The dangers of novel corona viruses are threatening. As a healthcare provider, we have an ethical responsibility to educate patients about these risks and to ensure that the guidelines provided by the governing body guide us in preventing the virus from spreading. At the same time, we have to do everything we can to meet our bioethical commitments and help our patients. The situation continues to be dynamic with the scenario together with regulations are upgraded even each day. The health care worker needs to be conscious of these changes and must keenly follow the government's health care website to be suitably updated. The situation needs to be tackled with knowledge, common sense and awareness.

“A problem is a chance for you to do the Best”
So, let's all put our best foot forward.

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Original Research Paper

Knowledge, Behavior and Practices of General Public towards COVID-19 – a study from Islamabad

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ABSTRACT

Background: The epidemic of the novel Corona virus has become the most difficult pandemic worldwide as so far there is no treatment found. It can be fatal if we do not follow the precautionary guidelines suggested by World Health Organization and Ministry of health. In this context, community needs to have knowledge on this serious health issue and should adopt positive behavior to practice precautions fighting against COVID-19 and protect not only themselves but their loved ones and the society at large. The objective of this investigation was to examine the knowledge, behavior and practices of general public towards novel COVID-19.

Methodology: 266 persons were enrolled in this cross-sectional study was conducted in various public places of Islamabad from 28th March 2020 till 11th April 2020. A pretested questionnaire by systematic random sampling was administered with basic demographics after taking written informed consent. Individuals were randomly selected and were questioned to know their knowledge, behavior, and practices during the corona virus pandemics.

Results: 42.1% participants had knowledge of COVID-19 pandemics through electronic and print media while 37.2% shared that they acquired the knowledge through social media. Majority of the participants reported fever (23.6%) and flu (23.3%) as the most common symptom of corona virus. 20.67% respondents acknowledged use of facemask and 19.54% reported hand washing as a precautionary measure. Majority (22.18%) of the participants reported that they practicing hand washing regularly and 20.67% stated that they do wear facemasks. Around 12.4% of the participants had knowledge about intake of healthy diet and were practicing it as protective measure. Results were computed through frequencies and percentage.

Conclusion: The crux of the study reveals that knowledge, behavior and practices about novel corona virus infection and its prevention was found to be comprehensive and satisfactory. However, it is still urgent to further strengthen community education on the symptoms and modes of transmission of corona virus infection in all over the country. Our study also depicted that media campaign and talks by the relevant authorities to equip nation with knowledge was an effective strategy in this extraordinary situation.

Key words: Knowledge, behavior, practice, covid-19, Islamabad.

Introduction

The recent outbreak of novel corona virus has been characterized by the World Health Organization as one of the most challenging pandemic outbreaks of present era. Corona virus infections are respiratory viruses and known to cause illness ranging from the common cold to severe acute respiratory syndrome (SARS) [1].

Corona virus being highly infectious disease, do presents with following symptoms such as flu, fever, cough, fatigue, muscle and body pains. It was reported that 18.5% of the COVID -19 patients in China, extended to the severe stage, with clinical presentation of acute respiratory distress syndrome, septic shock, difficult-to-tackle metabolic acidosis, and bleeding and coagulation dysfunction [1-3]. The border countries of Pakistan highly affected including China, where the COVID-19 outbreak experienced first time in Wuhan City and became major public health issue [4]. The COVID-19 pandemics have an effect on more than 209 countries. Italy was highly affected with highest number of COVID-19 mortalities while in the north, Iran a high number of mortalities after the Italy [5]. In Pakistan, the first case of COVID-19 has been confirmed by the Ministry of Health, government of Pakistan on February 26, 2020 in Karachi, Sindh province [6-7]. All of the confirmed cases had recent travel history from Iran, Syria and London [8].

In Pakistan to assist epidemic management of COVID-19, there is an urgent need to understand the public's awareness of COVID-19 at this critical moment. In this study, we investigated the knowledge, attitude, behavior and practices towards COVID-19 of general public. The COVID-19 is spread by human-to-human through droplets, feco-oral, and direct contact, with an incubation period of 2-14 days [9]. So far, no antiviral treatment or vaccine has been recommended explicitly for COVID-19. Therefore, applying the preventive measure to control COVID-19 infection is the utmost critical intervention [10].

Precautionary measures may include washing hands carefully and regularly with water and soap or any hand washing sanitizer¹¹.

Community awareness is very much needed in this regard to adopt protective measures like personal hygiene, social distancing, staying at home and have healthy life style. In this study, we investigated the knowledge, behavior and practices towards COVID-19 of general public. These areas are supposed to mainly influence the degree of devotion to the personal protective measures. Therefore, it is important to study these areas in our population.

Methodology

A survey was conducted in various main markets of sector F-7, F- 10, I-8 and G-9 from 28th March 2020 till 11th April 2020. Sample was comprised of 266 participants. Random sampling was used to select individuals for interviews. The sample size taken from each sector was as follows: A) 66 from F-7, B) 68 from F-10, C) 66 from I-8, D) 66 from G-9. Standard SOPs were to be followed by both researcher and participant as per WHO and MOH guidelines. Informed consent was taken from the participants. This study was approved by the Institutional Ethics Committee. Research tools were divided into two parts: Basic demographics, which included variables like gender, age, gender, qualification, employment status and per month income (Table 1). A self-developed comprehensive and well-organized questionnaire which covered the domains of knowledge, behavior and practices related to COVID-19 among common people.

The inclusion criteria were general public, adults of any gender in the main market places of four sectors of Islamabad, 18 years and above age, and at least with primary grade level of education. Only those participants were enrolled and interviewed who has given written consent before participating in the study and fulfilled the inclusion criteria.

The questionnaires included recourse of knowledge about corona virus, knowledge about symptoms, knowledge on precautionary methods and practice of precautionary methods to avoid covid-19 pandemic (Table 2-5). Responses were recorded as "Yes", "No" and "Not sure". Analyses were performed using frequency and percentages.

Results

266 participants were enrolled in this study. There were 179 (67.29%) male and 87 (32.70%) females. Majority (88(33.08%)) of the participants were between 18-28 years, while only

27(10.15%) were above 60 years of age. About educational qualification, 31 (11.65%) individuals fall between primary to secondary level, 47 (17.66%) were between metric- F.A, 108 (40.60%) of them were graduated while 80(30.07%) were Masters or above degree holders. There were 89(33.45%) individuals in government service, 76 (28.57%) in private services, 55 (20.67%) were doing business, 23 (8.64%) were house wives while same number was either student or unemployed. About monthly income only 22 (8.27%) reported below Rs.30, 000, 107 (40.22%) had earning between Rs.31, 000- 50,000, while 137(51.50%) reported above 50,000 Rs. Sample was taken from four sectors of Islamabad. Basic demographics of the participants have been illustrated in Table 1.

Table 1 – Basic demographic data

Variables	N = 266	%age
Age		
18 – 28 years	88	33.08%
29 – 39 years	64	24.06%
40 – 59 years	87	32.7%
Above 60 years	27	10.15%
Gender		
Male	179	67.29%
Female	87	32.70%
Qualification		
Primary - Middle	31	11.65%
Metric – F.A	47	17.66%
Graduation	108	40.60%
Masters and above	80	30.07%
Occupation		
Government service	89	33.45%
Private service	76	28.57%
Business	55	20.67%
House wife	23	8.64%
Others	23	8.64%
Monthly Income		
Below 30, 000 Rs.	22	8.27%
31,000 – 50,000 Rs.	107	40.22%
Above 50,000 Rs.	137	51.50%
Sector wise Participants		
F-7	66	24.81%
F-10	68	25.56%
I-8	66	24.81%
G-9	66	24.81%

Table 2 described the resource of getting knowledge about corona virus infection. 112 (42.10%) reported that they acquired knowledge through both electronic and print media, 99(37.21%) through social media, 45 (16.91%) through family & friends and 10 (3.75%) through health professionals. Following responses were identified by the participants on questions about knowledge on common clinical presentation of corona virus infection: 63 (23.68%) fever, 62(23.30%) flu, 55 (20.67%) cough and difficulty in breathing by 33 (12.40%), sore throat 23(8.64%) etc. (Table 3). When asked about the precautionary methods for avoiding risk of developing Covid-19, majority of the participants had knowledge of: using facemask 55(20.67%), 52(19.54%) hand washing, 28(10.52%) healthy dietary pattern, 23(8.64%) staying at home, 22(8.27%) use of gloves, 21(7.89%) use of hand sanitizers, social distancing 20(7.51%), avoiding hand shaking 18(6.76%), avoiding crowded places 17(6.39%), and exercise 10(3.75%) (Table 4).

Table 5 is about practicing the precautionary methods to stay safe from Covid-19. 59(22.18%) participants reported that they do practice hand washing regularly, 55(20.67%) uses facemasks and 35(13.15%) uses gloves whenever they goes out of home and places where it needed, equal number that is 18 (6.76%) individuals uses sanitizers and maintain social distancing, 14 (5.26%) stated that they do practice staying at home and avoiding leaving the home unnecessarily, on inquiring about avoiding shaking hands and crowded places equal number of participants 11(4.13%), reported that they are practicing it. 7(2.63%) do practice avoiding touching their mouth, eyes and nose with hands, only 5 (1.87%) persons shared that they do practice exercise, although 3.75% had knowledge about benefits of exercise to avoid risk of covid-19. But majority 33(12.4%) stated that they do take healthy diet and since heard about benefits of vitamin c and intake of fluid they consuming it to fight against risk of developing corona virus infection and boost immune system.

Table 2 – Knowledge resource about corona virus

No.	Resource	N = 266	%age
1.	Media (both electronic and print)	112	42.10%
2.	Social Media (Internet, WhatsApp, face book etc.)	99	37.21%
3.	Family & friends	45	16.91%
4.	Health professionals	10	3.75%

Table 3 – Knowledge about COVID–19 symptoms

No.	Symptoms	N = 266	%age
1.	Flu	62	23.30%
2.	Cough	55	20.67%
3.	Sore throat	23	8.64%
4.	Fever	63	23.68%
5.	Difficulty in breathing	33	12.40%
6.	Headache	10	3.75%
7.	Muscle or joint pains	11	4.13%
8.	Abdominal Symptoms	06	2.25%
9.	Dizziness	03	1.12%

Table 4 – Knowledge about COVID–19 precautionary methods

No.	Precautionary methods	N = 266	%age
1.	Hand washing	52	19.54%
2.	Use of facemask	55	20.67%
3.	Use of gloves	22	8.27%
4.	Use of sanitizers	21	7.89%
5.	Social distancing	20	7.51%
6.	Staying at home	23	8.64%
7.	Avoiding hand shaking/hugging	18	6.76%
8.	Avoiding crowded places	17	6.39%
9.	Exercise	10	3.75%
10.	Healthy diet/ Use of hot fluids / Vitamin C containing food etc.	28	10.52%

Table 5 – Practice of COVID–19 precautionary methods

No.	Precautionary Methods	N= 266	%age
1.	Hand washing	59	22.18%
2.	Use of facemask	55	20.67%
3.	Use of gloves	35	13.15%
4.	Use of sanitizers	18	6.76%
5.	Social distancing	18	6.76%
6.	Staying at home	14	5.26%
7.	Avoiding hand shaking/hugging	11	4.13%
8.	Avoiding touching nose, mouth, eyes	07	2.63%
9.	Avoiding crowded places	11	4.13%
10.	Exercise	05	1.87%
11.	Healthy diet/ Use of hot fluids / Vitamin C containing food etc.	33	12.4%

Discussion:

The current study aimed at describing the knowledge, attitudes, and behavior of general public about novel corona virus pandemic and the results could suggest an insight on the approaches necessary to successfully deal with this important subject of community health.

Basic demographics showed that majority of the study participants were male (67.29%) and 33% were between 18 years to 28 years of age. Per month income was reported as 51.50% above 50,000 PKR, 40.22% had 31,000- 50,000PKR, while only 8.27% were earning below 30,000 PKR.

Our study depicted overall an adequate knowledge, positive attitude and behavior of towards prevention of corona virus. The reason can that study population was taken capital city of Islamabad and from market places located in elite and upper middle to middle class sectors, where majority were literate. A previous study conducted on awareness of knowledge, attitudes, and practices related to EVD prevention and control among the participants also shown same results. It explained that individuals gained key information through the intensified education and mobilization and change in behavior since got knowledge about Ebola [12]. Results of our study reveal that 40.6% participants were graduated while 30% were masters and above. Most of them were in government service (33.45%) as shown in Table 1.

Another study shares the finding of a high correct rate of COVID-19 knowledge in Chinese residents was unexpected, because this epidemiological survey was conducted during the very early stage of the epidemic. Authors considered that this is primarily due to the sample characteristics: 82.4% of the study sample held an associate's degree or higher. The grave circumstances of the outbreak and the overpowering reports on this community health crisis this population would actively be trained and get knowledge of this infectious disease from a range of information resources. They have found significant positive association between levels of education and COVID-19 knowledge scores supporting this assumption [13].

On inquiring about the resource majority (42.1%) reported that they got knowledge about corona virus through electronic and print media, 37.2% through social media, 16.9% through family and friends while only 3.75% through health professional. The reason for tele-media or social media being the greater source of knowledge about corona virus is that in this era people are more exposed to these technologies and grabs information from these resources faster (Table 2).

About knowledge on COVID-19 symptoms, most of the participant (23.68%) reported fever as a symptom of corona virus infection. 23.30% thought about flu, 20.67% about cough and 12.40% about breathing difficulty. 8.64% said sore throat, 4.13% muscle pains, 3.75% headache, 2.25% abdominal symptoms and only 1.12% believed in dizziness (Table 3). Our results are correlated

with a previous study conducted in Riyadh which shows that the most common symptom of corona virus is fever (85%) [14].

About questions on knowledge concerning the precautionary methods against corona virus infection, participants showed satisfactory knowledge as 20.67% considered facemasks, 19.54% to hand washing and 8.27% to use of gloves as a precautionary method. The reason of this knowledge can be the government and media campaigns where it is stressed to adopt such measures for avoiding Covid-19 spread in the community (Table 4).

Majority of the participants (22.18%) of our study considered practicing hand washing to be a precaution. 20.67% reported that they use of facemask as a protective measure. 13.15% said that they wear gloves as a prevention. Number of participants was similar on practicing use of sanitizer and social distancing (6.76%). About not using sanitizers, participants shared different views like unavailability or shortage of it, or being an extra expenditure, and few said they do forget using it. Only 5.26% stated that they mostly practice staying home, while majority was saying that for job or other tasks they cannot stay home. 4.13% were practicing avoidance of crowded places and shaking hand or hugging, while majority stated that it's our tradition and we are habitual to such practices and its often difficult to avoid when we meet others. Only 2.63% individuals shared their concern and carefulness about touching nose, eyes and mouth. A lesser number of participants (1.87%) were practicing exercise though they considered it important healthy habit. 12.4% participants were practically using healthy diet as a protection against corona virus infection. They reported that they are aware of the facts that intake of vitamin c and frequent use of fluid can help fighting against covid-19. Results of a past study is similar to our study in which 85% participants showed positive behavior towards washing hands and an effective way to prevent coronavirus infection, 81% use of mask, and 66% considered wearing gloves to be a preventive method and 21% avoided fast food as a preventive method [14].

Results of another study reported that there was a frequent use of sanitizers, hand wash, and masks which indicates the increasing concern of participants towards personal hygienic measures to avoid COVID-19 infection. This was reflected in their behavior and attitude significantly as most of the participants (more than 4/5th) agreed with – social distancing, avoiding travel, self-quarantine and adequate hygienic measures [15].

Creating awareness on pandemics protects the community from developing problems other than health like financial or psychological. As our study was conducted in a capital city where majority of the participants were well aware of the outbreak of COVID-19 and its prevention but it is important to create knowledge among people living in remote areas. They need to be educated on personal hygiene and guiding them to avoid touching their mouth, eyes, or picking nose with their hands.

Our study group was well aware and practicing healthy life style which includes balanced diet pattern and exercising for boosting their immunity. As we know there is no treatment found to date to cure corona virus infection and the only source of protection is the precautionary measures, so the general public needs to be well equipped with knowledge to support in decrease the multiplication of the virus. Knowledge, attitudes, and practices can direct people at every corner of the world to adopt healthy and productive lifestyle in prevention of corona virus infection as well as changes in the kinds of practices that need to be followed regarding the prevention of it.

Conclusions

The crux of the study reveals that knowledge, behavior and practices about novel corona virus infection and its prevention was found to be comprehensive and satisfactory. However, it is still urgent to further strengthen community education on the symptoms and modes of transmission of corona virus infection in all over the country. Our study also depicted that media campaign and talks by the relevant authorities to equip nation with knowledge was an effective strategy in this extraordinary situation.

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Knowledge, Attitudes and Practice of Medical Termination of Pregnancy amongst doctors in Shillong, Northeast India

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ABSTRACT

Background: The Medical Termination of Pregnancy (MTP) Act was passed in India in 1971 with a view to curbing unsafe abortion done illegally in unhygienic conditions by unskilled hands. This study was conducted to explore the current knowledge, attitudes and practice of doctors in Shillong regarding the legal and ethical aspects of pregnancy termination.

Methodology: Structured self-administered questionnaires comprising 20 items related to the topic of the study were distributed to doctors practicing in Shillong city. Data collected over a period of one year (May 2018 to April 2019) was fed into a computer and analyzed using SPSS Version 11 by descriptive analysis.

Results: A total of 52 completed questionnaires were retrieved. Among the respondents, 69% had more than 10 years of experience as practitioners. Medical abortion was preferred by 76.9% of doctors owing to its safety in the early weeks of gestation. All participants agreed that women must be counseled before going ahead with the procedure.

Conclusion: In spite of its legal status in India, doctors in Shillong are of the opinion that abortion should be an exception rather than the rule. It may be judiciously applied in emergency situations where the life of the mother or the fetus is at stake.

Key Words: abortion, legal, ethical, practitioners, Shillong.

Introduction

Abortion is defined as termination of pregnancy before the period of viability. The Medical Termination of Pregnancy (MTP) Act was passed in India in 1971 with a view to curbing unsafe abortions done illegally in unhygienic conditions by unskilled hands [1]. This legislation lays down the indications and gestational limit for MTP, the place where it can safely be done, and the experience of a qualified person who can conduct the same employing approved methods and

procedures. An amendment of the law in 2002 also seeks to address the twin problems of maternal mortality and female feticide [2]. The issue of abortion is a complex one with wide-ranging medical, legal, ethical and social implications. In some communities, there is a stigma surrounding it and it is viewed as an act of killing a life [3]. Hence, a doctor has to abide by the rules while performing medical termination of pregnancy – violation of any of the legal provisions could lead to disciplinary action or punishment. That is why it is imperative for all registered medical practitioners to be aware of the laws related to their practice and specialty. At the same time, the cultural background and choices of patients in need of abortion care must be respected. In a developing country like ours, maternal mortality attributed to abortion is 12-18% in different states [4]. It is therefore essential to ensure universal access to safe abortion by qualified professionals when medically indicated. In this regard, the Ministry of Health and Family Welfare (MoHFW) issued national training and service delivery guidelines for comprehensive abortion care in the year 2010 [4]. The Drug Controller General of India (DCGI) had earlier approved the use of Mifepristone (RU 486) with Misoprostol (PGE1) to terminate up to 7 weeks (49 days) of gestation which is reflected in the amendment of the MTP Act in 2002 [5].

The present study was proposed to find out the current knowledge, attitudes and practice among both general duty and specialist doctors working in Shillong regarding the legal and ethical aspects of medical termination of pregnancy. It is our aim to introduce remedial measures in the form of workshops and seminars on medical law and ethics to make practitioners more equipped in dealing with such issues on a day-to-day basis.

Methodology

This was a cross-sectional descriptive study conducted on general duty and specialist doctors who have done or are trained in MTP procedures and working in government and private hospitals in Shillong city. Purposive (consecutive) sampling was performed where all doctors who agreed to participate freely and willingly in the study were included. Data collection took place over a period of one year (May 2018 to April 2019) in the form of a structured self-administered questionnaire comprising 20 items related to the topic of the study. The questionnaire was divided into three parts to test knowledge (Items 1-6), practice (Items 7-11) and attitudes (Items 12-20) of medical termination of pregnancy. Responses to questions related to attitude were graded on a 1 – 5 points Likert scale, where 1 – Disagree completely, 2 – Disagree, 3 – Neutral, 4 – Agree and 5 – Agree completely.

The nature and purpose of the study was explained and written consent obtained from all participants. A sample questionnaire was pilot tested and modified accordingly. In addition, personal interviews were conducted with 7 specialists working in local private hospitals and registered with the Shillong Obstetrics & Gynecology Society (SOGS). Data collected was entered in Microsoft Excel 2007 sheet and analyzed with the help of SPSS version 11 by descriptive analysis. This project was approved by the Institutional Ethics Committee (IEC) in September 2017.

Results

A total of 52 completed questionnaires were retrieved. Among the respondents, 25% were male and 75% female doctors with 88.5% in the age group ranging from 20 – 49 years and a mean age of 35.15 years. The majority (69%) had more than 10 years of experience as practitioners and 60% of them had a postgraduate degree or diploma in Obstetrics & Gynecology. More than 80% of respondents were aware of the qualification and experience of a person who could legally perform pregnancy termination and where it could safely be conducted. However, only 61.5% knew about documentation and procedural requirements as per the MTP Rules, 2003 [6].

In relation to practice, 50% of participants responded that they performed pregnancy termination mostly for social reasons, i.e. failure of contraception in a married woman. Most practitioners (61.5%) stated that they had conducted medical abortion with Mifepristone and Misoprostol in the first trimester of pregnancy while 80.8% of them replied that it was preferred by the majority of treated patients. As regards the number of cases taken up for medical termination of pregnancy, 44.2% of doctors responded that based on personal experience it was less than 5 in a month, 23.1%

had done 5 – 10 cases and 19.2% more than 10 cases per month. In our sample, 44.2% of respondents claimed that they had not encountered any complication during the procedure while 44.2% said that they had. However, one specialist doctor mentioned that there was a case of perforation of the uterus following the procedure.

Table 1 – Knowledge of legal aspects of MTP (n=52)

No	Item	No. of correct responses	% of correct responses
1.	Who can legally perform MTP?	42	80%
2.	Who can give consent for MTP?	47	90%
3.	Scenario where MTP is legally indicated	45	86%
4.	Place where MTP can be conducted	46	88%
5.	No. of doctors required to opine in 2 nd trimester MTP	49	94%
6.	Documentation as per MTP Regulations, 2003	32	61.5%

Out of the 7 Ob-Gyns that were interviewed, 6 of them admitted that they did not practice MTP for varying reasons as cited:

“I do not practice MTP because it conflicts with my practice of treating infertility. My colleague also does not do it for the same reason” (Lady Doctor, age 35 years, Private Practice)

“Our hospital is run by a Catholic administration which does not allow it” (Lady Doctors, ages 43 & 45 years, Private Hospital)

“I do not carry out abortions even though permitted under the MTP Act, 1971 as it is against my personal beliefs” (Lady Doctor, age 38 years, Private Practice)

“I only practice medical abortion with Mifepristone and Misoprostol upto 7 weeks of gestation. I don’t do surgical MTP” (Lady Doctor, 35 years, Private Hospital)

In the study population, 82.7% agreed that unsafe abortion is related to maternal mortality while 76.9% concurred that medical methods of abortion are safer if done early in pregnancy. Again, 88.5% stated that the treating doctor should recommend MTP if the fetus is not yet viable and continuation of the pregnancy is life threatening to the mother. More than half (53.8%) of participants opined that pregnancy termination be permitted only in exceptional circumstances. Moreover, 63.5% agreed that doctors should be able to refuse on moral grounds even if permissible by law. Opinion was divided on whether to extend the legal limit for MTP beyond 20 weeks of gestation, with 38.5% of doctors supporting it and 44.2% against it. The majority of participants (75%) were not in favor of trained Auxiliary Nurse Midwives (ANM) and Ayurveda practitioners conducting abortion in remote areas where registered medical practitioners are not always available. However, all respondents unanimously agreed that women must undergo mandatory counseling and a waiting period before deciding to go ahead with the procedure except in an emergency. On the other hand, 98% opined that counseling of women after MTP is important to reduce stress and to prevent further unwanted pregnancies.

Discussion

As the practice of abortion in India is strictly regulated by law, it is imperative for practitioners to be familiar with the various legal provisions and rules governing medical termination of pregnancy. In addition, it has several ethical and social implications which can affect decision making by doctors. Attitudes to abortion are innate and shaped by culture and religious beliefs, among other influences. In the present study, we have made an attempt to elicit how much qualified doctors in Shillong know about the legal and ethical aspects of abortion. Secondly, we have tried to find out the current trends in practice such as the number of terminations on a monthly basis and associated complications, if any. Thirdly, we assessed the attitudes of practitioners to abortion to find out if they are comfortable doing it as a routine or only as a lifesaving measure.

Table 2 – Practice of MTP (n=52)

No	Item	No. of responses	% of responses
1.	Most common indication for MTP in practice* Medical (Therapeutic) Eugenic (Genetic) Humanitarian Social	22 1 4 26	42.3% 1.9% 7.6% 50%
2.	Most commonly employed method for 1st trimester MTP Medical (Mifepristone+Misoprostol) Surgical (D & C) Manual Vacuum Aspiration (MVA) Other	32 14 5 1	61.5% 26.9% 9.6% 1.9%
3.	No. of cases of MTP conducted per month <5 5-10 >10 No answer	23 12 10 7	44.2% 23.1% 19.2% 13.5%
4.	Complications encountered during the procedure Yes No No answer	23 23 6	44.2% 44.2% 11.5%

*The total does not add to 100 due to multiple responses

Table 3 – Attitudes of doctors to MTP (n=52)

No	Statement	Agree*	Disagree**	Neutral	No response
1.	Unsafe abortion is related to maternal mortality	82.7%	11.5%	5.8%	-
2.	Medical methods are safer if done early in pregnancy	76.9%	13.5%	7.7%	1.9%
3.	Recommendation by doctor in life threatening situation	88.5%	3.8%	5.8%	1.9%
4.	Legal limit for MTP should be extended beyond 20 weeks	38.5%	44.2%	15.4%	1.9%
5.	Other health practitioners should be allowed to conduct MTP	21.2%	75%	3.8%	-
6.	Pre-abortion counseling for women	100%	-	-	-

*Includes points 4 and 5 on the Likert scale. **Includes points 1 and 2 on the Likert scale

The World Medical Association adopted a resolution that therapeutic abortion can be justifiable only if done in good faith to save the life of the pregnant woman when it is materially endangered by continuation of pregnancy (Declaration of Oslo, 1970) [7]. In India, apart from legislation, Section 7.15 of the MCI Code of Ethics Regulations 2002, states:

‘A Registered Medical Practitioner shall not refuse on religious grounds alone to give assistance in or conduct of sterility, birth control, circumcision and MTP when there is a medical indication, unless the medical practitioner feels himself/herself incompetent to do so’ [8].

Table 4 – Attitude score of study participants

No	Item	Mean $\pm$ SD
1.	Unsafe abortion is related to maternal mortality	4 $\pm$ 0.9
2.	Medical methods are safer if done early in pregnancy	4 $\pm$ 0.9
3.	Recommendation by doctor in life threatening situation	4 $\pm$ 0.7
4.	Legal limit for MTP should be extended beyond 20 weeks	3 $\pm$ 1
5.	Other health practitioners should be allowed to conduct MTP	2 $\pm$ 1
6.	Pre-abortion counseling for women	4 $\pm$ 0.5

In our study, we found out that more than 80% of practitioners knew about the legal provisions of the MTP Act, 1971. This is in contrast to a study conducted in Mexico in 2009 (n=418) where only 8.4% of participants had accurate notions of current laws within the state where they practice [9]. An assessment of medico-legal awareness of practicing obstetricians and gynecologists in Maharashtra, India (n=79) revealed that 32.9% of practitioners were not aware of laws governing their practice [10]. Research done by Puri and others (Nepal) demonstrated that auxiliary nurse-midwives can independently and successfully provide medical abortion at even lower levels of care and where there is no physician on site [11]. The same is not acceptable in India as the MTP Act specifically mentions that only registered medical practitioners with requisite qualifications and experience can legally perform an abortion under certain circumstances. In our study, we found that 75% of doctors were not in favor of other health practitioners performing pregnancy termination procedures. According to Ganatra and others, this resistance may in part be related to protecting professional turf [12].

As regards practice, 44.2% of participants in the present study stated that they performed less than 5 pregnancy terminations in a month. On the other hand, the findings of Acharya and Kalyanwala in 2010 show that 90% of respondents conducted an average of 7 MTPs on a monthly basis [13]. Research conducted in Calabar, Nigeria showed that 56.3% of private medical practitioners managed 2-3 cases of pregnancy termination in a week while 83.3% treated patients with post-abortion complications such as incomplete abortion, hemorrhage and uterine perforation [14]. In the present study, 44.2% of respondents had encountered complications during conduct of MTP. Our findings reveal that the method most commonly employed for pregnancy termination in the first trimester was medical (61.5%), dilatation & curettage (26.9%) and manual vacuum aspiration (9.6%). This differs from the Nigerian study (n=48) where 36.4% of doctors performed dilatation & curettage (D & C), 18.2% did manual vacuum aspiration (MVA) and 18.2% a combination of the two in the first trimester of pregnancy. None of the doctors reported using medical methods [14].

In the present study, 82.7% of practicing physicians agreed that unsafe abortions are related to maternal mortality which is consistent with a Mexican study where 85.5% of respondents opined that unsafe abortions are a health issue in the community [9]. Most of the doctors who practiced MTP worked in government hospitals and those from the private sector expressed a reluctance and personal conflict in carrying out the procedures. It is important to have accurate information to convey to the patient and to counsel her properly so that she can take an autonomous and informed decision regarding her treatment. An ethical concern for the health and wellbeing of vulnerable women in society should be a priority. The role of counseling both before and after any procedure is emphasized to allay anxiety, to discuss pros and cons of proposed interventions, to provide possible alternatives to abortion and assurance of socio-economic support on the merits of each case. According to Moss, counseling is also an opportunity to discuss prevention of unintended pregnancy and sexually transmitted infections in the future [15]. Medical professionals should strive towards the goal of respecting the rights, dignity and integrity of women and sustain the doctor-patient relationship by winning the trust of the people they serve.

Conclusion

In a nutshell, this study demonstrates that medical practitioners in Shillong have adequate knowledge of the legal provisions governing pregnancy termination except for documentation and

procedural requirements described in the MTP Rules, 2003. While government doctors are compelled to perform MTP as per law, private practitioners expressed a reluctance to do so except in circumstances where the life of the fetus or the mother is at stake. On the whole, there is a need for our doctors to be updated on current laws, rules and guidelines on abortion and to keep abreast of proposed changes to legislation in recent years.

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Conviction rates of alleged rape offenders from 2006-2016: A special reference to false rape charges in NCT Delhi

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ABSTRACT

Background: Reported rape incidents in India are increasing each year. The present study was undertaken to analyse the conviction rate of the alleged rape offenders in the whole of India. It also reviewed the Delhi High Court judgements with respect to alleged rape offences.

Methodology: This is a retrospective record review of data from the websites of Delhi High Court and the National Crime Record Bureau between January & December 2017. The data having the keyword 'rape' in judgements given by the court during the year 2017 were included in the analysis. The false rape cases included cases in which the court found that the women had accused the person of committing rape but actually rape had not been committed.

Results: In 2017, there were 51 judgements with the word 'rape'. In 13 cases, the word 'rape' appeared for reasons other than the actual 'rape' instance, while the rest 38 cases were actual rape offences. The accused was acquitted of rape charges in 24 cases; of which 21 cases were false charges of rape.

Conclusion: The present study shows that the rate of acquittal in alleged rape cases is very high in India; either due to the false allegations of rape charges or lack of evidence to prove it beyond reasonable doubt. We were able to find out ulterior motives of the victims, which led her to falsely accuse a man of a heinous crime such as rape.

Keywords: Rape, False Rape crimes, Delhi rape incident, Section 376 IPC

Introduction

Rape is legally defined under the Section 375 of I.P.C. and the punishment for Rape, Gang rape and rape under custody is defined under S 376 IPC and its subsections [1]. A major amendment in the rape laws took place in 2013 after the infamous Nirbhaya Rape case which shook the whole of India [2]. The previous rape laws differed as compared to the current rape laws in terms of age of consent being 16 years, penetration of any object inside the women's mouth, urethra, anus, and vagina now constituted as rape, medical examination being made an exception, consent being

defined, Punishment under Section 376 was increased with highest punishment being Hanging to death in some (e.g. - Repeat offence, Sexual Assault that leaves women in a permanent vegetative state, Gang Rape).

As per news reports, the conviction rate of rape cases has been abysmally low [3]. In the aftermath of the Mathura Custodial Rape case of 1972, an important law related to rape was enacted namely 'The Criminal Law Amendment Act, 1983'. It introduced the Section 114A in the Indian Evidence Act (IEA), 1872. As per this section, where sexual intercourse by the accused is proved and the question is whether or not consent had been given by the woman; and she states in her evidence before the Court that she did not consent, the Court shall presume that she did not consent. In the year 2018, rape was the fourth highest commonly reported crime against women after Cruelty by husband (Sec. 498 A IPC), Assault on Women with Intent to Outrage her Modesty (Sec. 354 IPC) and Kidnapping [4].

A study to assess the conviction rates was done in India in which the court judgements were analyzed and judges interviewed [5]. Our study additionally analyzes the National Crime Records Bureau (NCRB) Crimes in India report over the past decade (2006-2016) as well Delhi High Court judgments on rape cases. The specific reason that Delhi was selected is due to the reasons of Court judgements being easily available from an official source (Delhi High Court website) and Delhi is infamously called the rape capital of India because of the rising cases over the years [6].

The NCRB releases its publication "Crimes in India" annually. It lists the statistics related to various crimes collected over each year. As per the 2016 reports, Delhi was ranked number one in both the number of rapes as compared to metropolitan cities as well as crimes against women as compared to whole of India [6], hence it is also infamously called as the rape capital of India. Hence, this study was conducted to evaluate the reasons for rising reported rape incidents, trend of Conviction rate of Rape cases over the years and to note the instances wherein a man is falsely accused of rape. Conviction rate of crime is defined as number of cases where the accused was convicted divided by the total number of cases that were disposed of by the courts [6]. Prosecutrix is a woman who brings a charge against someone in a court of law [7]. In this case it would be the rape survivor. Precedent is a decided case that furnishes a basis for determining later cases involving similar facts or issues [8].

The aim of the study was to analyze the Conviction rates of alleged rape offenders from years 2006-2016 and analytically review the Judgements given by Delhi High court in rape case. The objectives were –

- a. To represent trend of the conviction rate, reported cases, pendency percentage of Rape cases
- b. To determine if there are any rape allegations which are false
- c. Determine the Relative evidentiary value of the testimony of the prosecutrix as opposed to Other corroborative evidence

Methodology

The study was conducted in Government Medical College Baroda, Gujarat from 1st June to 31st June 2019. This was an observational cross Sectional study based on record review.

The data collection was from the following two sources –

- a) To find the court judgments related to rape offences the website- <http://delhihighcourt.nic.in/freetextsearch.asp> was used to find relevant court cases and were analyzed. After going through all the 51 Judgements, we sorted out the cases in which False Rape charges were made. The false rape charges included the cases in which there was element of falseness in the case either because the rape charges had been added to increase the punishment levied by the court, due to some other personal problem with the accused or when the relatives of the victim found out about the consensual relation of the victim with the accused.
- b) Data related to crime and conviction rate was taken from the National Crime record bureau website – <http://ncrb.gov.in/>. The annual statistical publication named "Crimes in India" from the years 2006 to 2016 was used to gather data.

The following parameters are for the 'Data source 1'

Inclusion criteria

- The court judgements from 01/01/2017 to 01/01/2018
- Judgement contained the keyword 'rape'

Exclusion criteria: Cases where the term 'rape' had appeared but the charges were not of rape
The sampling method used was convenience sampling.

Variables –

- **Qualitative** – Sex of the Judge, False case or not, Reason for being false, arguments used by defense lawyer, whether or not the accused knew each other or not, whether or not reliance was placed on medical evidence
- **Quantitative** – Age of Female, length of the judgement

Data Collection and Analysis: Data was entered in and analyzed using Microsoft Excel. Qualitative data is expressed using percentage

Results

Crimes in India (2006-2016)

There was an increase in the number of reported rape cases over the decade with 19348 cases in 2006, 24206 in 2011, which almost doubled after 10 years 38946 in 2016. (Table 1, figure 1 and 2) For the rape cases in 2016 (n= 38946), charge sheet was submitted by police in 88% (33628) of cases. For the remaining cases they either found them to be False (2839, 7%), True but insufficient evidence (1474, 4%), Mistake of Fact (249, 0.63%) or Non Cognizable (66, 0.17%) (Figure 3)

Table 1- Crimes against women, reported rape cases and their conviction rate

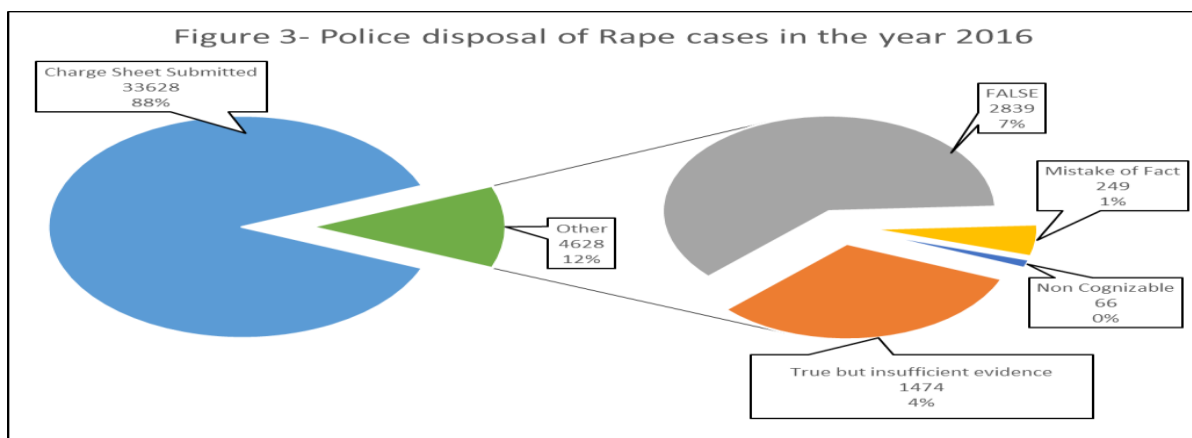
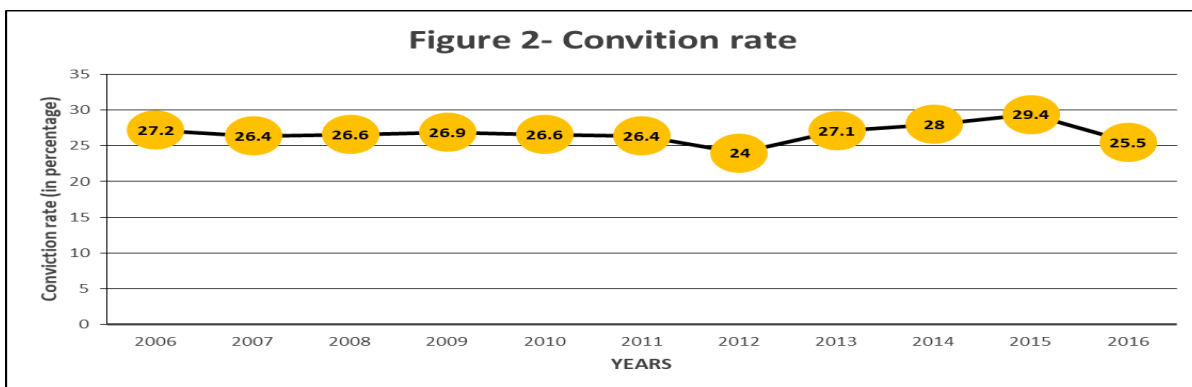
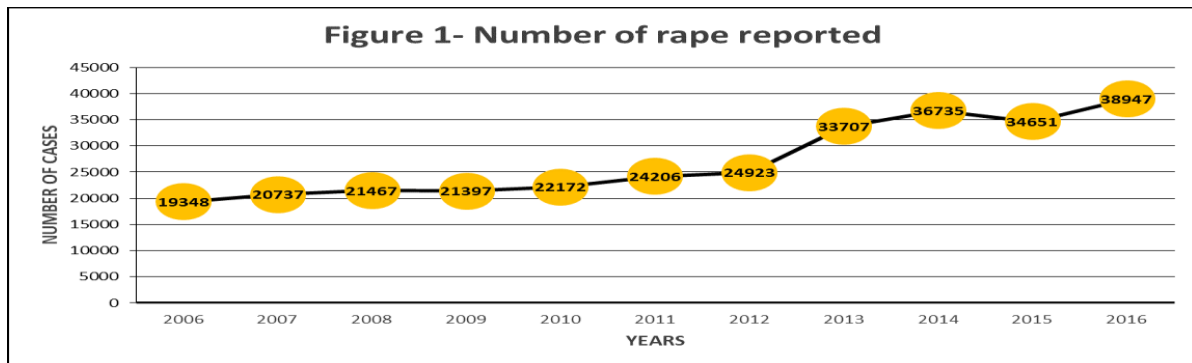
Year	Crimes against women	Rape case Reported	Rape as a % of crimes against women	Rape as a % to total IPC crimes	Conviction rate* (%)
2006	164765	19,348	11.74	1	27.2
2007	185312	20,737	11.19	1	26.4
2008	195865	21,467	10.96	1	26.6
2009	203804	21,397	10.50	1	26.9
2010	213585	22,172	10.38	1	26.6
2011	228650	24,206	10.59	1	26.4
2012	244270	24,923	10.20	1	24
2013	309546	33,707	10.89	1.3	27.1
2014	337922	36,735	10.87	1.3	28
2015	327394	34,651	10.58	1.2	29.4
2016	3,38,954	38,947	11.49	1.3	25.5

*Conviction rate of crime is defined as number of cases where the accused was convicted divided by the total number of cases that were disposed of by the courts

Judgement analysis

As per the classification of Delhi High court Cases (2017), 51 cases had the term rape. However 38 judgements out of these were actually related to rape; of whom court rejected bail or held the

accused guilty of rape in 14 cases. In 21 out of 24 cases where the accused was acquitted, the case was that of a false rape charge case (Figure 4).



In the 25 rape cases (65.7%) the age of the victim was mentioned. The mean (SD) age of the victim was 18.6 (7.4) years with maximum age of 33 and minimum age of four years. In 5 cases (20%) the female was aged between 18 and 30 years and in 17 cases (68%), the female was a minor. As compared to 2017, rape Crimes data, 50.2 % of females were aged between 18 and 30 and 30.3 % were minor (Table 3)

All judgments were written in English. Occasionally, some Hindi words were used to express the original verbatim words of the victim. The length of the judgments differed substantially. The shortest judgment was of four pages and the longest judgement was of 26 pages. The judgement in the actual rape cases (n=38), was delivered by a male judge in 58% cases, 37% were female judge in 37% cases. In the remaining 2 cases, judgement was delivered by a two judges bench (also called a division bench) which comprised of a male and female judge in one case (2.6%) and two female judges in the other (2.6%).

Out of the 21 cases which were false rape allegations, 13 cases had the female as a consenting party, while in 8 cases, there were major Discrepancies in statements made by victim. All the reasons with their relative frequency is given in Table 2.

In the actual cases of rape (n=38), 64 % were appeals against a lower court judgement. Most of these appeals were made by the convict (27, 51%). The rape victim went into appeal against appeal in only 6 % of cases (3). The rest of appeals against acquittal was made by the State (4, 7%) (Figure 5). Out of the 38 actual judgements related to rape offences, in 55.2% (21) cases the accused was known to the Victim. Comparing this with the 2017 rape crime data, in 93.05% cases, was the accused known to the victim

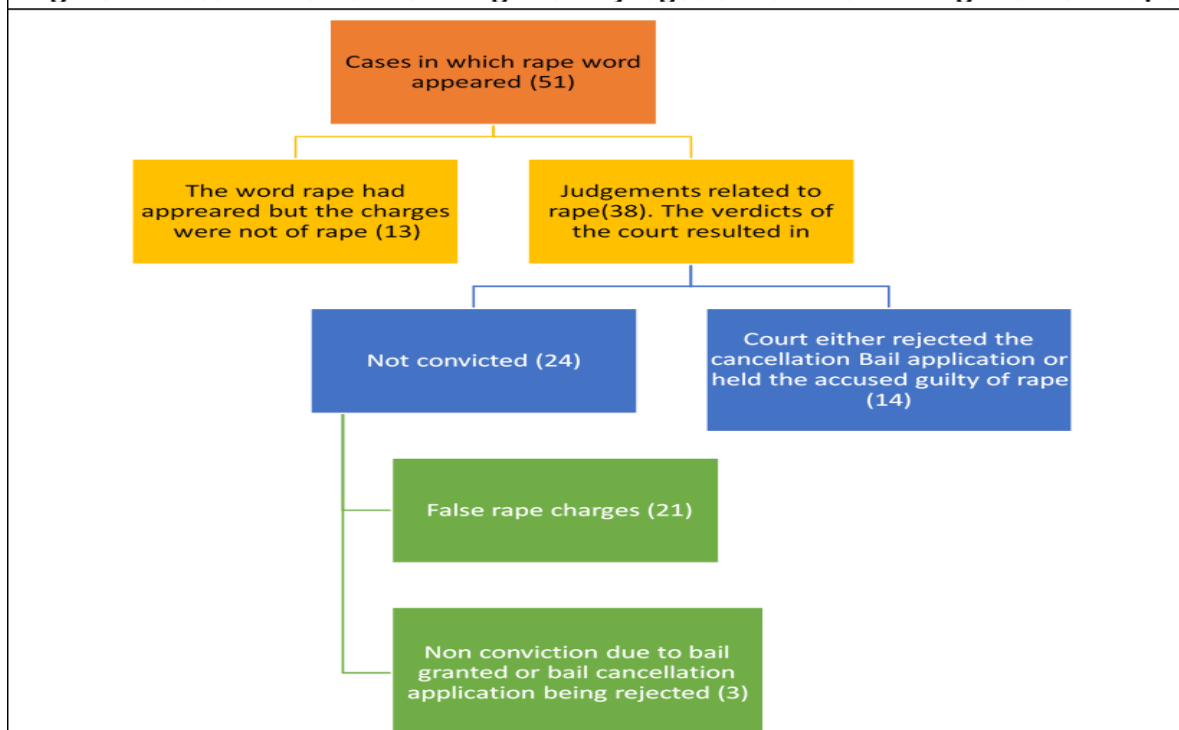
Table 2- The reasons for being false

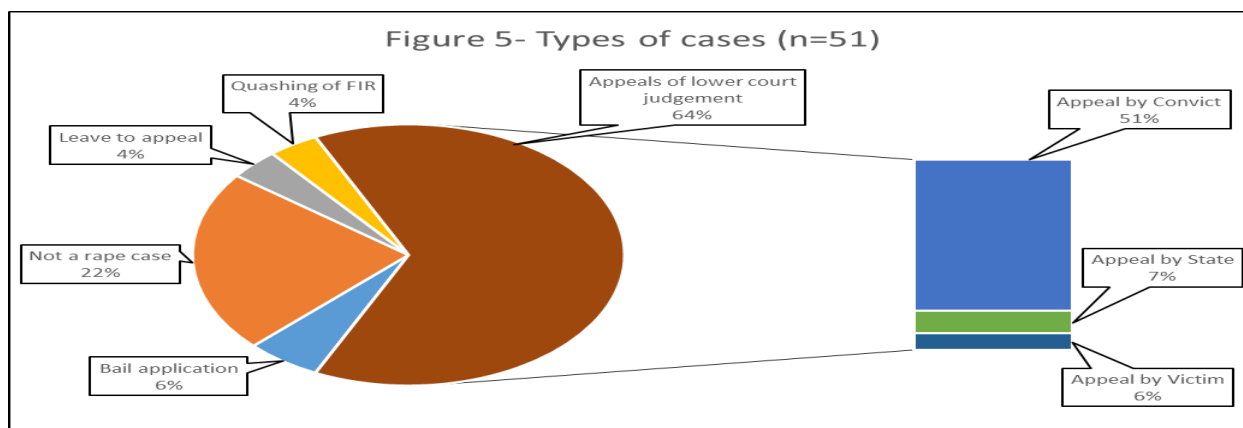
Reason considered for being false	Frequency
Consenting party	13
Major Discrepancies in statements made by victim	8
Case Modified to include rape due to personal enmity	6
The claim that false pretext of marriage was done to obtain consent was deemed wrong	2
Insufficient evidence	1

Table 3- Comparison between judgement analysis and NCRB report

Parameter	My results	NCRB report (2017)
Accused was known to the victim	21/38 (55.2%)	30299/ 32559 (93. 05%)
Rape committed against females aged 18 to 30 years	5/25 (20%)	16900/ 33658 (50.2 %)
Rape committed against females aged less than 18 years	17/25 (68%)	10221/33658 (30.3%)

Figure 4- Classification of Delhi High court judges of 2017 containing the word rape





Discussion

This paper is set out to explore the domain of false rape cases and the conviction rate in rape cases. A key contribution of this article is that it explores a relatively under researched area of Trends in conviction rate, reported cases, pendency percentage of Rape cases. Rape cases have been increasing over the few years. In order to verify this trend, this study was conducted over a period of 2006-2016. In addition to the study earlier conducted [5], this study compared the data from the Delhi Court Judgement and the NCRB data.

This study notes an increase in the rape cases over the years. This can not only be attributed to increasing numbers of rape being committed but also due to criminalization of non-penetrative assaults like forceful oral sex. After 2013, the Criminal Law (Amendment) Act, 2013 also known as the Nirbhaya Act, widened the scope of Rape as defined under Sec. 375 IPC (2). A notable spike in number of cases can be seen in year 2014 (Figure 5) and it could be possibly due to public outrage over the issue of rape and the acceptance of the victims of sexual offences. This would have encouraged females to increasingly report the crimes that were previously not being done. As about eight out of ten of the rape cases in India were earlier not reported [9-11] there are chances that increased reporting of cases could be responsible for the rising number of rape cases reported. Yet, the conviction rate remained more or less stable with it being 27.2 % in 2006 and 25.5 in 2016.

Comparing with the previous study [5], this study also contained maximum appeals in High courts by the convicts (Figure 2). Similar to the view expressed by the judges who were interviewed in the study. The High Court quoted the precedents laid down by Supreme Court regarding the sole testimony of the prosecutrix being directly considered without appropriate corroboration by the evidence. From the quoted Supreme Court judgements, it can be said that if vital discrepancies and not just minor inconsistencies had arisen in the statement given by prosecutrix, then the court needs to look into the medical evidence for corroboration. It was when the evidence placed on record did not back the statement made by the women and witnesses, the court gave the accused the benefit of doubt and acquitted him.

Some of the landmark judgements of the Supreme Court on the matter of 'Testimony of the prosecutrix' have been reproduced here. In *Abbas Ahmed Choudhury v. State of Assam* [12], the Supreme Court observed that a case of sexual assault has to be proved beyond reasonable doubt as any other case and that there is no presumption that a prosecutrix would always tell the entire story truthfully

In *Sadashiv Ramrao Hadbe vs. State of Maharashtra & Anr* [13], the Apex Court while reiterating that in a rape case, the accused could be convicted on the sole testimony of the prosecutrix if it is capable of inspiring the confidence in the mind of the Court, put a word of caution that the Court should be extremely careful while accepting the testimony when the entire case is improbable and unlikely to have happened. This is what has been stated:

In a judgement entitled *Shiv Pujan @ Shubh Karan Vs The State (NCT of Delhi)* [14] the Delhi High court stated that vital discrepancies and infirmities have emerged in the statement of the prosecution witnesses. It therefore proceeded to corroborate statement of the women with the evidence.

A study in which judges were interviewed on the matter of cases of sexual assault [5] one of the judges said he found “*It is unimaginable that a young girl in Indian society would concoct an untruthful story and level charges of rape for the purposes of blackmail, animosity or revenge*”. A key finding from the study was that the position of the judges reflects a belief that victim must be genuine because the associated shame and stigma is so powerful that it obviates false reports.

The Judges place reliance on corroborative medical evidence in the establishment of charges of rape against the accused. In the earlier study done [5], in ten cases medical evidence being non reliable was noted. However, in this study, no such defence being used in the Judgement analysis was noted. However, in 25 of the 38 judgements (those actually pertaining to rape) and in 14 out of the 21 (perceived false rape cases) there was a reference about the medical evidence by the court. In five of the 21 false rape charges, no signs of sexual assault noted in the medicolegal report helped the judge to conclude that sexual contact (if any) was consensual. Quoted below are two excerpts of judgements of the case analysed in this study.

In X (Assumed Name) V. State & Anr. [15] the court said “*There was no corroborating evidence to lend credence to the victim’s statement. FSL report did not indicate the respondent’s involvement in the crime. Nothing has come on record if any time, the prosecutrix had offered resistance or had suffered any injury on her body to infer forcible rape; she never got herself medically examine*” (Emphasis supplied)

In another case of Ranjeet V. The State (NCT of Delhi) [16] the High court said “*As per the MLC of the prosecutrix, there was no bite mark on the cheek of the prosecutrix, rather there was a bruise and swelling on her right cheek. There is difference between a bite mark and bruise mark*” (Emphasis supplied)

The Delhi High Court judge in the case of State (NCT of Delhi) Vs Kamruddin Alam [17], said that no women would file a charge of sexual molestation only to falsely implicate the accused. Therefore when the circumstances appearing on record of the case disclose that the prosecutrix does not have a strong motive to falsely involve the person charged, the Court should ordinarily have no hesitation in accepting her evidence.

Here, we found that delay in reporting was a common defence used to discredit the victim. However the judges seemed to be sensitive to a victim’s situation, showing understanding and empathy to ‘the social pressure and the stigma attached to the crime’ and the ‘circumstances in which the victim is under fear or in trauma’. In the case of Jaishree Vs the State (NCT of Delhi) [18] the judge has laid down emphasis on delay in reporting of FIR.

The law on delay in filing of FIR was clarified by the Supreme Court in the case of Mehraj Singh vs. State of U.P. [19], wherein the court held that FIR in a criminal case is a vital and valuable piece of evidence. Delay in lodging the FIR often results in embellishment, which is a creature of an afterthought. When there is a delay, the FIR gets bereft of the advantage of spontaneity, danger also creeps in of the introduction of a coloured version or exaggerated story

In another case, the Court while hearing a Criminal appeal filled by Mukesh [20], one of the convicts of the Nirbhaya rape case said Delay in lodging of complaint in court or FIR at police station is normally viewed by courts with suspicion because there is possibility of concoction of evidence against an accused. Therefore, it becomes necessary for the prosecution to satisfactorily explain the delay. However Even a long delay can be condoned if the informant has no motive for implicating the accused

In another one of a recently supreme court judgement in the case of P. Rajagopal & Ors. Etc. vs. State of Tamil Nadu [21], while placing reliance on Mukesh’s Judgement [20] said if the delay is satisfactorily explained, the Court will decide the matter on merits without giving much importance to such delay. The Court is duty bound to determine whether the explanation afforded is plausible enough given the facts and circumstances of the case.

In a previous study [5] it was stressed that the process followed by police under Code of Criminal Procedures leads to inevitable contradictions and discrepancies. Discrepancies in the statements made by the victim although given weightage is seldom the ONLY reason why the rape accuse is acquitted. Often there are more reasons for the court to believe that the accused is not guilty of committing rape

The Supreme Court in the State Of Punjab vs Gurmit Singh & Ors [22] said

“In cases involving sexual molestation, supposed considerations which have no material effect on the veracity of the prosecution case or even discrepancies in the statement of the prosecutrix should not, unless the discrepancies are such which are of fatal nature, be allowed to throw out an otherwise reliable prosecution case”

From the Figure 3 it can be seen that sometimes rape charge is levied just to increase the magnitude of the actual offence that was committed or due to personal enmity between either the victim and offender or their relatives, false rape charges were framed similar to found in the study which interview judges. One of the judges in their interview said *“Pressure from the family was said to lead to a different presentation of the self to maintain dignity and honour in front of the family. The central idea being presented in such cases is that such relationships are consensual and only become labelled as abusive when the parents are on the scene”*

The following are two instances in our Judgement analysis where rape allegation was made due to personal animosity. In the case of Ranjeet [16] the Delhi High Court after confirming from three sources (Prosecutrix statement, accused's statement and witnesses' statement) concluded that quarrel used to take place between the accused (Ranjeet) and the victim and the victim was not sexually assaulted by Ranjeet.

In the case of Mahendra Vs State (NCT of Delhi) [23]) the court said *“As noted above, the prosecution witnesses have admitted enmity and tutoring. Further there are material improvements from the FIR which was also registered after deliberation. There is no corroboration to the version of the prosecutrix either from medical evidence as the hymen was old ruptured and as per the FSL report the blood on the salwar was not connected to the appellant. In view of the evidence on record, it can be safely held that the prosecution has not proved beyond reasonable doubt that Mahender committed the offence punishable under Section 376 IPC”* (Emphasis Supplied)

Immoral character of the female is sometimes used as a defence by the accused. The word like “habituated to sex” are used to a female that might have had previous intercourse. It has been clarified in the explanation 2 of the S. 375 IPC that, for each ‘Specific’ sexual encounter, the consent has to be obtained separately. The explanation also states that a consent to a previous sexual encounter cannot be considered as implied consent for subsequent sexual encounter. Even if a woman has had previous intercourse, the chances of the present case being that of a sexual assault cannot be dismissed directly. The Indian Evidence act was amended in 2002 (24) which now prohibits the defence lawyer to question the women on her previous sexual acts, her personal life, and other private matters. However, the actual effectiveness of this amendment is questionable because recently in an interview, Advocate AP Singh who represented 3 of the 6 accused in Nirbhaya Rape case did not regret the fact that he his strategy included maligning the deceased victim [25].

The two fingers test helps in determining laxity and the sexual activity of the victim i.e. whether the victim is sexually active or not. In a major victory, The Supreme Court has banned this test on the grounds that it violated right to privacy and dignity [26].

The Conviction rate in 2016 has seen a decline from 2006. There could be various reasons for this. It has been said that eight out of ten rape cases are never reported, either due to shame or the stigma that the society attached with a rape victim [9-11]. Therefore, the cases which are reported might be false. Although it cannot be safely concluded that maximum of cases is false from the high conviction rate. However even senior forensic experts [5] carry this perception that Rape is announced when caught and that Real rape cases are very less as they are not reported because of social pressure or fear. Furthermore, improper investigation leads to less sufficient generation of evidence. If evidence cannot be generated then the guilt of the person to convict him of rape cannot be proved beyond reasonable doubt. In Ram @ Ram Kumar Vs The State (NCT of New Delhi) [27] the High court judge condemned the delay of lodging reporting by the police as well type of investigation conducted by them. The police also diluted the charges against the accused by not filling the case under IPC S. 376 (Rape) but rather under IPC S. 511 read with S. 367 (Attempt to commit rape). The court also acknowledged the fact that since the prosecutrix and other family members belonged to poor strata of society and were not so educated, minor discrepancies and inconsistencies in their statements which do not affect the core of the prosecution case are inconsequential. Along with improper filling of police reports, in some instances the Forensic

reports contained discrepancies as well. In one such case of K V. The State (NCT of Delhi) (28) the judge said that-

"When the first time blood sample of the respondent was sent for DNA finger printing, no DNA could be separated.... It is also not explained how DNA could be separated from the same underwear later on. Further from the evidence led by the prosecution, the safe custody of underwear from 2008 to 2010 when it was sent for DNA Finger Print has also not been proved. Thus the finding of the learned Trial Court that the possibility of tampering of the case property or putrefying of the samples could not be ruled out cannot be faulted with. the respondent being entitled to be acquitted cannot be held to be perverse warranting interference."(Emphasis Supplied)

Looking at the number of cases pending before the courts from the previous year then one may conclude that judicial proceedings with respect to rape cases is in a sorry state. In 2016, approx. 33000 cases of 2016 which were sent for trial. However about 118000 cases were pending from previous years i.e. 4 times of the cases under trial of year 2016. Only about of 54.4% of the number of cases from that year alone (18,000 out of 33000 in 2016) are actually concluded. This leaves (118,000 + 33,000) – 18,000 cases pending at the end of 2016 (134,000 cases).

The pendency percentage is about 87.6 percentage $[134,000 / (118,000 + 33,000)]$. This leads to delay in getting justice in a rape case. From the above case we can also infer that delay in the court proceedings can lead to a person being acquitted of the crime he committed because the possibility of tampering of evidence cannot be ruled out

Conclusion

The Conviction rate, unfortunately has remained stagnated over the years while the number of cases keep on increasing. I conclude that there are case where false rape allegations are made. For each case there were multiple reasons why the case was probably a false allegation.

Relative evidentiary value of Female's testimony and Corroborative evidence: The Delhi HC while placing reliance on the various Supreme Court Judgements regarding presumption of consent and concluded that "broad principle that the prosecution has to prove its case beyond reasonable doubt applies equally to a case of rape" [14]. From the analysis of the common defences used by the advocate of the accused I conclude that the judges sometimes don't accept the prosecutrix statement when there are vital infirmities in them and looks for independent corroboration by medical and police investigation.

The detrimental effect of false rape allegations on the society: Just like a rape victim faces shame and stigma in the society, the rape accused could also faces some stigma. Although I don't intend to imply that one is to be put above the other or they should be compared with each other. Instead I mean to say that an alleged rape offender is also defamed after a false rape case is filled against him. Therefore, due weightage needs to be put on the false rape charges as well. In Raju v. State of Madhya Pradesh [29], the Supreme Court stated that

"It cannot be lost sight of that rape causes the greatest distress and humiliation to the victim but at the same time a false allegation of rape can cause equal distress, humiliation and damage to the accused as well.." (Emphasis added)

Future Scope

Since 2009, victims of any crime have been given the right to lodge an appeal against acquittal of the accused [30] but because of the low number of victim appeals in this study, a study to explore the nature, extent and outcome of such appeals would be useful.

As far as the precedents set by the Supreme Court while dealing with a case sexual molestation is considered, most of the recommendations are followed. For example, the name of the prosecutrix is to hidden [22, 31], and the court relies on the sole testimony of the prosecutrix when the testimony is sufficient so as to arise the confidence in the court and medical evidences are corroborated when necessary [32]. The recommendation that was not followed was 'Whenever possible female judges tries a case of sexual molestation' made by Supreme Court in case of Gurmit Singh (20) and as mandated by the Section 26(a)(iii) of the Code of Criminal Procedure, 1973 [33].

Limitations

Firstly, the notion whether or not the case is false is based on the authors' personal review of the judgement. It could happen that the case was of a true rape case but the accused was acquitted. In future an analysis of only the cases which are tagged false by court could be done to have a better understanding about false rape cases.

Secondly, only Delhi high court judgments were analysed due to ease in accessing the court judgments. In a future study, Supreme Court or other high court judgments could be analysed. A word of caution is worth mention. The findings of this study may not be generalizable within or outside India however some of my findings from judgement analysis did actually resembled the NCRB report. Studies conducted under a similar premise will help strengthen the understanding of so called 'False rape allegations'

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Need, Benefits and Bioethical issues in Online education during COVID-19 Pandemic: a health science student's perspective

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Introduction

COVID-19 Pandemic has led to closure of medical schools and academic activities have been withheld leading to delay in various courses and postponement of exams. This situation demands introduction of new modality of teaching for distant education in medical school to reduce the academic burden. This was done using online education platforms like 'Dudal' and 'Zoom'. Our intent is not to provide solutions, but to understand the needs, benefits AND bioethical issues surrounding online education platforms in a health science institution which will help in shaping opinions of students, teachers and administration so as to meet the best needs and provide education without compromising on ethical viewpoint.

What is Online education?

Online education is defined as "education being delivered in an online environment through the use of the internet for teaching and learning. This includes online learning on the part of the students that is not dependent on their physical or virtual co-location. The teaching content is delivered online and the instructors develop teaching modules that enhance learning and interactivity in the synchronous or asynchronous environment" [1]. In my institution, online education platforms used were Dudal and Zoom.

Why sudden need of online education platforms in medical school in wake of COVID-19 Pandemic?

Due to increasing COVID-19 cases government felt the need for strict measure to control infection. As a result, lockdown was introduced throughout Nepal. In accordance with this, medical colleges were also closed and students were asked to return to their home. Medical colleges in Nepal mainly comprise of students from India and Nepal. With rising cases in both countries, re-opening of medical colleges seems to be a distant possibility. Also, borders are closed and no one is allowed to cross. Even if students are allowed to come to their respective colleges, gathering of students in classrooms and wards will expose them to further risk of infection. This could prove very detrimental. Also, no one can say for sure when this pandemic is going to be over. This led to question, till how long will the teaching be suspended? As withholding classes for long would lead to huge academic burden on both college administration and students, introduction of a new modality of education in the form of online education platforms was thought of.

Factors affecting the choice of online education platforms

Before the start of classes using online-education platforms, college administration tried to evaluate various factors such as service provider, cost and availability of cellular data/ Wi-Fi, network connectivity, network speed, location of students, liberty to re-attend the classes even if it gets missed in the first place, limitation of various platforms and interaction between teachers and students. These factors were taken into consideration and opinion of students was sought through various meetings. After a lot of mulling over, Dudal and Zoom were finalized.

Benefits and Drawbacks of Online education platforms

Dudal platform was chosen to conduct remaining theory classes. This proved to be a good platform to allow students from remote areas to access it even with slow network speed. Also, students were able to access classes later on for review or in case they were not able to connect during the scheduled timing. But, learning through this medium was limited. The major issue being not able to ask questions directly instead students had to type the questions and wait for the teacher to see it and then only they could get the answers. Also, teachers were not able to see the students, which led to lesser bonding during lectures. The teachers usually enquired whether we were syncing with them or not, because they felt as if they were teaching their computer screens and not the students per say.

Importance of a good diagram is a must in learning medicine. Not being able to use pointer as used in the Lecture Theatres, posed a challenge for the teachers to explain and the students to understand. This led to fewer interactions between the students and teachers and became of a more one-way flow of information, as it was clearly evident that even if the teacher took an extra step to disseminate the information, we, as students, would definitely not meet them even half way!

Despite Dudal being designed for less network speed, many times there were problems in internet connection due to server problems. This further limited the efficacy of education provided to students. We had to wait for minutes before the class actually started. We would thank our stars if the class ended without any interruption because it was usually inevitable. The rhythm of the class would get broken and the attention and concentration for understanding the concepts were sacrificed.

Zoom was another platform used for online seminars. This required better connection to access, but it was necessary to allow students to conduct online seminars. Zoom provided with better picture visualization leading to better learning. Students were able to use tools such as highlighter and pointer which added multi-dimensional approach to learning. But many students from remote areas found it difficult to access as it required more data and better network speed, meaning more money in an already crisis situation.

Despite trying their best, network issues caused classes to be prolonged, delayed and rescheduled again and again. This proved to be very distressful to both student and teachers. Not many students seemed interested in attending lectures because of these issues. Both these platforms have limitation as they could never be an alternative to hands on experience during clinical posting in wards and OPDs.

Bioethical Issues Surrounding Online education

Is it accessible to all?

Online modality of education was introduced considering availability of internet connection to all. But this was not the actual scenario. Even if students had access to internet, many of them faced connection problems. This made access to these education platforms limited. This has led to violation of bioethical principle of **equality**.

Are students trained for online education?

Most of the students are not trained for online education platforms. This raises question about the information shared and its actual benefit to students. Because of this ethical principle of **beneficence** has been put to test. It would have been better if some training course was organized, especially for students in order to help them get maximum out of online classes.

Privacy, confidentiality and Non-maleficence in online education

College administration is storing Name, Roll no., Email id and IP addresses of the students. Also, on zoom the whole of the class was being recorded and stored. This stored sensitive data if leaked can have negative impact on health of both students and teachers.

In medical education, sensitive information is discussed which is not meant for general public to see. This can be abused by private or public institutions. There were many instances of unknown people logging in to Dugal using names of students, and mocking the students and teachers and sometimes typing vulgar comments. This is a form of online bullying and harassment and was reported to concerned authorities. On Zoom, usually there was no unauthorized access. Yet there were cases of students receiving threats via email. This means that the hackers got access to the information which was supposed to be kept confidential. All of this denote **breach in privacy and confidentiality**. Though the administration was doing their best, the principle of **Non-maleficence** is being put to test indirectly. Serious questions were being raised regarding the security of all data being stored on these platforms. It is the responsibility of college administration to safeguard privacy and confidentiality of students and teachers, and clearly more efforts are needed.

Economic Burden due to online education

As students need to use these platforms for about 2 to 3 hours daily, access to online education platform led to extra economic burden for students. In contrast to India, Internet connection is costly in Nepal. So, students especially in Nepal had to shed extra dollars for online education. Especially, students from low socio-economic status are at disadvantage. This raises a serious ethical question on our **social responsibility**. Is it not our responsibility to protect the vulnerable and disadvantaged in difficult times?

Is online education promoting equality, equity, and respect to diversity and pluralism?

Still there seems to be no substitute for face to face classroom education. In health science education, quite often there is need to demonstrate a process to the students in order for them to understand. Social connection is very crucial for improving instructional effectiveness and building a sense of community [2]. For some students, lower level of social interaction and bonding might make them feel less interested in the course content. Also, different students have different ways of learning. This education modality has put a limitation to learning by audio-visual way and is **not in accordance with principles of equality and equity**. Bioethical principles of respect to diversity and pluralism have been put to test, thus making them more of platforms where students need to conform.

Does this do justice to its goal of reducing academic burden?

This style of learning has helped in reducing time of session as compared to all classes being conducted in college itself. But there is an area of concern regarding the efficacy of online learning for health science students. These platforms can **never be a substitute to clinical postings**. Also, the fact that there will be increased burden on students to complete the clinical postings in quick time will put more pressure on already stressful life of health science students. Theory and practical education are supposed to go side-by-side for consolidation. The fact that our theory classes have been completed and we are having a long gap before the practical are resumed keeps us at an edge as it will require much more effort for the same amount of learning.

Unethical behavior by students?

Dugal does not provide regulation for unethical behavior by students. Anyone can log in, which can lead to online bullying and harassment. Zoom provides better control over the viewers in this regard but the security issue is still a major concern.

Conclusions

In COVID-19 pandemic, online education platforms have become main modality of medical education throughout the world and in Nepal. The introduction of online education platform is the need of the hour and no alternate modalities have been observed. This dependence on single

platform has led to debate on the bioethical issues surrounding the online education platforms. In this article we reflected on some general issues arising from use of these modalities. There were instances of breach in equality and equity. Also, the economic burden on vulnerable population raises questions on our responsibility to protect the vulnerable. The extent to which these platforms promote diversity and pluralism is a matter of debate. Moreover, the modality in use is no substitute to face to face classroom interaction and clinical postings, raising questions on beneficence. All these lead to ethical dilemma on whether or not to continue with these education platforms. Despite of all this, online education seems to be the last resort till the COVID-19 cases begin to decrease and classes can be resumed. So, we need to strengthen the learning process by addressing the bioethical issues.

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Ethical Viewpoint Paper

Hiromitsu Nakauchi's Organ Farming is playing God

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Introduction

Organ transplantation is challenged with non-availability of organs for candidates on the waiting list. In 1994, over 30,000 Nigerians were on the organ waiting list. By 2010, the organ waiting list had grown to nearly 93,000 patients, with only a few received an organ from altruistic donors and tourism [1]. Despite the effort of the Nigerian government to increase organ donation, yet organ shortage persists. The question is, how can we proffer a solution to the current organ shortage? Nakauchi demonstrated the possibilities of growing human organs in animals. This could close the gap between the demand and supply of organs.

This review evaluates Hiromitsu Nakauchi's organ farming as playing God. We contend that the rejection of organ farming would further worsen the organ crisis because it could close the gap between demand and supply. However, organ farming could lead to the spread of zoonotic disease such as the corona virus (COVID-19), if the genetic cultivated organs are transplanted into a human being

Xenon is a Greek word, which means "remote." Shima et al argue that Xeno means stranger or alien [2]. Xenotransplantation is the process of transplanting animal cells, tissue, into a human being. Additionally, Xenotransplantation or xenografting refers to the transplantation of organs of animals from different species [3].

Hindu religion presents its mythology of xenotransplantation. xenotransplantation was made with no learning of the species hindrance. According to Hindu mythology, Icarus the son of Daedalus had to fly across the ocean, from Crete to Terrain in Greece, with the assistance of a fowl feather appended to his wings. Icarus effectively made the adventure, with the aid of the attached chimaeras but with no conceivable instance of hyperacute or dismissal [4]

The Nuffic Council on bioethics reports, "There is a prospect in xenotransplantation. xenotransplantation could supplement the supply of human organs for clinical transplantation [5]. With the approval of immunosuppression drug, organ recipients from chimaeras would live much longer [6]. There are different methods of organ donation; incentive for organ donation, presumed consent, mandated choice, and post humus organ sale. First, let us discuss Hiromitsu Nakauchi Organ farming

Hiromitsu Nakauchi Organ farming

Hiromitsu Nakauchi is a physician and geneticist. At Stanford University, Hiromitsu Nakauchi proposed a solution to the problem of organ shortages. Nakauchi demonstrated the possibilities of growing human organs in animals. He grew a mouse with a rat pancreas, the rat-grown mouse pancreases were transplanted into a diabetic mouse, and they made enough insulin to cure the condition without being rejected [7]. "We found that the diabetic mice were able to normalize their blood glucose levels for over a year after the transplantation of as few as 100 of these islets. Furthermore, the recipient animals only needed treatment with immunosuppressive drugs for five

days after transplantation, rather than the ongoing immunosuppression that would be needed for unmatched organs" [8].

Nakauchi says he plans to proceed slowly, and will not attempt to bring any hybrid embryos to the term for some time. Initially, Nakauchi plans to grow hybrid mouse embryos until 14.5 days, when the animal's organs are mostly formed. Nakauchi will do the same experiments in rats, growing the hybrids to a near term, about 15.5 days [9]. The implication is that mouse pluripotent stem cell has the capacity of becoming any type of cell in the body. The rats are genetically engineered to develop their pancreas, relying on the mouse cells for its development. The "ultimate goal is to produce animals with organs made of human cells that can, eventually, be transplanted into people" [9]. We argue that organ farming could lead to the abuse of animals if not regulated.

An Evaluation of Hiromitsu Nakauchi Organ Farming

Hiromitsu Nakauchi should be applauded for the exploration of chimaeras, to providing organs for candidates on the waiting list. The deontological school of thought argued that organ farming amount to 'playing God'. It interferes with the natural process of creation and the introduction of zoonotic disease such as the (Covid 19) into the human population. We maintain that what is 'natural' ought to be respected as part of divine creation without violation [10]. Humankind has become so revolutionary, rebellious and trying to play God. The biblical view, support the above assertion that species integrity is necessarily defined by God, rather than an arbitrary or evolutionary forces [11].

Organ farming is the artificial creation of organs. The artificial organ is good, but it is unnecessary interference in the developmental stages of the natural organs. We contend that artificial organs could affect the body physiology when transplanted into human beings.

Bioethics Advisory Committee Singapore reports that the "interference with the process of creating life, is the interference with divine prerogative. This implies that human being may suffer from scientific or ethical hubris, a pride in the power that blinds us to limitations or unforeseen risks, and leads us as a society or as individuals to undertake things that wiser and more modest counsel might not have led us to" [11]

The most critical part of playing God argument, is that organ farming breaks 'natural boundaries' among biological species [12]. "Crossing species boundaries is about human beings playing God and in so doing challenging the very existence of God as infallible, all-powerful, and all-knowing. There are, for instance, those who believe that God is perfect and so too are all His creations" [13].

For the atheist, there are possible creatures that are not currently found in the world, the world cannot be perfect; therefore God, who made the world, cannot be perfect; but God, by definition is perfect; therefore, God could not exist" [13]. We argue that man knows the truth and cannot deny his Maker, but fights with it and strives to subjugate it, replacing it with his personal opinion (which becomes his private gospel from then on) [12].

Concluding reflections

The 'playing God' philosophy is an acceptable medical practice in the 21st century, due to technological advancements. However, organ farming seems to violate the divine law, is a religious claim [11]. Bioethics Advisory Committee Singapore reports that whatever we do will affect the future. The future generations will be affected by what we do now [13]. We argue that organ farming could be 'playing God,' if we prohibit research that might help patients suffering from organ failure.

However, it is morally wrong the unnecessary experimentation of animals. Animals have the right to exist without genetically crossed [10]. Crossing species boundaries would lead us to moral question about species identity. The belief that species have particular identities or boundaries

between species, seems an illusion. Fixed species identities and fixed boundaries between species are illusory because there is no ontological divide among species. We suggest that organ farming be encouraged for the common good of the society.

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Webinar Summary

Ethical Issues in Medical Education in the Wake Of COVID- 19

Sunday 3rd may 2020; GMT +0.50; 5:00 PM (India)

Webinar Lead and Chair: Prof Russell DeSousa, Chair, Dept of Education, UNESCO Chair of Bioethics, Australia.

Webinar Co-Chair and Moderator:

Prof Mary Mathew, Head Indian Program of the UNESCO Chair of Bioethics, India.

Dr. Animesh Jain, Professor, Dept of Community Medicine, Kasturba Medical College, Mangalore, Manipal.

Panellists:

1. Dr. David Gordan, President, World Federation of Medical Education, (WFME), UK.
 2. Dr. William Pinsky, President and CEO, Educational Commission for the Foreign Medical Graduates (ECFMG), USA.
 3. Prof. Trevor Gibbs, President, Association for Medical Education in Europe, AMEE, UK.
 4. Dr Jeanette Maldenovic, President, Foundation for Advancement of International Medical Education and Research (FAIMER), USA.
 5. Prof. Ming Kuang, Vice President, The First Affiliated Hospital & Vice Dean, Zhongshan School of Medicine, Sun Yat-Sen University, China.
 6. Prof. Kamila Hawthorne, Head Graduate Entry Medicine, Swansea University, Wales, UK.
 7. Prof. Madalena Patricio, President, Best Evidence Medical Education Board (BEME), University of Lisbon, Portugal.
 8. Prof Ciraj Ali Mohamed, Director MAHE – FAIMER Program, India.
 9. Alaa Abusufian Dafallah, Liaison for Medical Education International Federation IFMSA, Sudan.
 10. Prof Princy Palatty, Head, South India Unit of UNESCO Chair of Bioethics, Amrita University, India.
 11. Prof. Abhijit Sheth, President, National Board of Examination (NBA), India.
 12. Dr. Vedprakash Mishra, Former Chair, Academic Committee, Medical Council of India.
 13. Dr. Shiv Joshi, President of Students' wing of Indian Program of UNESCO Chair of Bioethics.
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Prof. Russell introduced the participants and the topic for panel discussion. In his opening remarks he mentioned, globally we are experiencing the breakage of the structure that provides safety and security to the individual and society as a whole. It is vital to uphold the fundamental principles of ethics. He mentioned '**Universal declaration of Bioethics and Human rights**' which was adopted by 195 countries on 19th October 2005 (Observed as '**World Bioethics day**'). He further specifically emphasized on the **article 13** that refers to humanitarian **solidarity** (moral values) and **Cooperation**...which signifies the sense of responsibility towards vulnerable people in society. He further stated that, this panel discussion involving leaders in the field of medical education representing various countries across the globe, in itself simulates solidarity and cooperation for combating COVID-19.

The COVID pandemic has posed an unprecedented challenge to mankind. It has led to disruption in many spheres of life - *Social, Economic, Political, Health care, Educational programs,..etc.* If we review the current scenario for Medical Education across the globe, then it is observed that most of the universities are shut down, the institutions are closed, the educational programs are disrupted, the traditional classes are suspended and there is no clinical exposure to the students. Travel restrictions, physical distancing have also made it challenging to conduct onsite teaching. As a result, the online or virtual classes and assessment have taken up the place of 'Face to Face' coaching. This has resulted in anxiety, stress and even mental health issues amongst many.

With this prologue, Prof. Russel set the stage and put the following questions for deliberations. Have we lost the humane part of the Doctor-patient relationship as well as Teacher-student interaction? Due to this pandemic, what are the ethical issues and challenges in preserving the Doctor Patient Relationship and having Technology as Medical Education Interface? How can we address these challenges? How to evolve the best possible curriculum and its delivery, when human to human interaction is taken over by technology.

Session 1: Preserving the Doctor-Patient relationship (Moderator- Dr. Mary Mathew)

At the outset, Prof. Mary Mathew, the moderator, took viewpoint of a UG and PG student:

Ms. Alaa, a medical student from Sudan informed that, due to the emergence of COVID, her final year examination suddenly came to a halt. There the institutions do not have enough infrastructure and facilities for online teaching-assessment, to compensate the learning lost. On the other hand, final year students are practicing in the emergency departments of hospitals, though they are not prepared and licensed for it. They are working under pressure and it may put them as well the patients in harm too.

Dr. Shiv Joshi, a resident postgraduate doctor from India expressed his concern on three aspects. **i) Learning ii) Thesis (Research project) iii) Examination**. He opined that, for learning theory, modalities like self study and webinar are of some help, but learning skills (hard and soft skills) is severely affected. Due to the COVID pandemic, there has been a sudden change in student's posting, marginalisation of routine academic activities, collaborative learning and shifting of focus to COVID related activities only. Similarly, the thesis and research work also got delayed due to inability to collect research data and pay visits to the field or study setting. With regards to examination, there is uncertainty, adding stress and insecurity amongst medical postgraduate students.

With these views and experiences from student representatives, Prof. Mathew informed that on 17th March, the Association of American Medical Colleges (AAMC) issued guidance recommending that member medical schools pause the student's clinical rotation for about 2 weeks. She further asked **Dr. William Pinsky from the USA**, whether it is ethical to bring the medical students to the frontline for managing COVID 19 pandemic. Prof. Pinsky opined that, there are many factors viz local cultural, availability of resources,...of each country, which may further influence the decision of involving students in emergency health care. He said, '*one answer cannot fit for all*'. He himself believed that the students should be given only such tasks and responsibilities that are within their knowledge and skill capabilities. Ideally the students need to be supervised while delivering the health care. They can be involved in emergency care only when they are accredited and well certified for the required competencies. He further added that, students who are not licensed can do many other things to relieve the work pressure on the healthcare system. They can be deployed as second line staff for the services like- *screening, medical record, health communication,..etc.* On asking, whether the students should be paid for their service, he expressed that, if resources are adequate, then the remuneration can be given; however, the money should not be the motivating factor for anybody working in health care.

Dr. David Gordan from WFME, supported Prof. Pinsky on these counts. He stated that, one should not be forced to do something, if he/she doesn't feel competent and confident. The students should not be exposed to risk by putting them as a frontline staff. Even for experienced people, it is a bit challenging to respond to such pandemic. However, the students not far from the final qualification, can be given an opportunity to work as a backup staff and learn new things. Once the students are willing to step up, they can surely learn a great deal. Regarding providing payment to them, there is no single answer. It will be surely challenging for the country having a large number of students.

Prof. Ming Kuang, from China said that the medical students in his country are asked to stay at home and are not allowed to go to the frontline for dealing with the COVID crisis. They were given online training. In the initial stage of the epidemic, the assistance of the postgraduate students was sought. But soon later, more experienced staff like those experts in managing Intensive care units and emergency departments took charge of the whole situation.

When asked to **Dr. Vedprakash Mishra**, from India, whether it is ethical to send the medical students for COVID work, especially when any country is lacking adequate stock of Personal Protective Equipment (PPE), he opined that, one needs to understand that, it is a contingent situation and here the regular traditional norms may not be followed.

He was in agreement with Dr. Gordan said that, any country should not force the medical students if they are not *thoroughly prepared, well equipped, competent and confident* to deal with COVID crisis. In India, the Undergraduate students are not registered under the statutory regulatory council and hence they are not certified to render the healthcare services. Hence, putting them to the front line is unethical and illegal too. On the other hand, the postgraduate student is an qualified Indian Medical Graduate and is expected to dispense his/her duty diligently. But even a postgraduate student needs supervision and adequate safety. Rather, the life of each and every health worker across the globe is precious. In India, the interns and PG students are given stipend for the services delivered.

Prof. Trevor Gibbs, UK opined that the choice of working for COVID or any other health crisis should be voluntary and free from coercion. Providing the PPE to the healthcare providers is of paramount importance for their safety. The students with pre-existing health risk should be excluded. Defining the role and responsibility of the students while working for such health emergencies is essential in addition to matching their competency with the tasks they are supposed to undertake. If the designated task is beyond the student's competency, then he/she should be given appropriate training. Ideally, the students and other healthcare workers should be provided with indemnity insurance for working in such risky situations. At his end, the final year medical students who were willing to contribute are moved to hospitals for working under supervision and support.

Prof. Mathew asked the next question to **Dr. Jeanette Maldenovic** that if a student is providing healthcare to a COVID patient, then should the patient be informed that he is receiving care from a student, who is not a specialist? Dr. Jeanette replied that on ethical grounds, the patient must be told about this truth. Secondly, being a trainee, the student's reflexes and responses are slow and are not so precise while providing healthcare. e.g. Practicing hand washing. Students may not understand the risk while working in such challenging situations. This may harm them as well as the patients. As mature academic leaders, we make sure that students are supervised and supported in their work.

Prof. Kamila Hawthorne, UK replied that, in Swansea, the medical students are very keen to help the NHS for the COVID work. Most of the final year medical students are interested in getting early registration to volunteer themselves for work. She mentioned that based on the competency the students possess, they are recruited at three levels of work viz basic, intermediate to higher level. Students have been supported by doing a careful risk assessment, arranging suitable

induction, preparation of work contract by local Health Boards, and provision of training and PPE. They also provided the students with weekly Zoom supervisions in small groups to enable debriefing and teach clinical skills as required.

Disruption of the clinical studies

With this discussion, Prof. Mathew raised the topic of **disruption of clinical studies** of the students due to COVID. She informed that the face to face learning is essential to sharpen the clinical and surgical skills by the students. But, now due to current COVID pandemic, teaching and learning of these skills seems to have taken a backseat. She put forth the question to the panellists, whether the lockdown and physical distancing is going to affect the clinical education of our future doctors? Are we going to have a generation of doctors as robots who lack empathy?

Prof. Gibbs stated that, there are many platforms to conduct Teaching and learning activities, even for skill development. But the key concern is whether online or virtual teaching can become a substitute for face to face teaching for this? Especially for postgraduates, there are bound to be gaps in knowledge, clinical skills and particularly the affective domain.

Dr. Pinsky opined that it is a critical question to answer. Indeed, it's the need of the hour for academic leaders across the world to come together, move forward and make progress to enhance the learning environment for our learners. Telemedicine is one of the facilities which has provided improved access to healthcare to patients in such health crises and also contributed to learning by students. He further added that, '*Empathy*' is a desirable social behaviour and it can't be taught as a whole to anybody. The teacher can enhance these affective domain skills amongst students by mentoring.

Prof. Ming Kuang informed that in China, the medical students are not allowed to join the mainstream health workforce to combat Corona, in order to not put them in harm and risk of getting infection. Lots of doctors and healthcare providers who worked as frontline teams, already got infected. Hence, the students are informed and updated about the onsite work done by senior staff and situation there through a virtual platform.

Prof. Gibbs, UK too endorsed that in order to facilitate the learning by medical students, the senior doctors and postgraduate students can share their work experiences through webinar, video conferencing wherein they can talk about personal protection devices, the covid patients, their treatment etc.

Thus, the panel discussion gave rise to a useful thought that sharing of experiences by the senior staff to their colleagues, junior doctors and students is one of the beneficial ways to facilitate and enhance the learning.

As per Dr. Jeanette there are lots of ways the students can learn empathy, but we can't teach somebody to feel something if they are not looking or experiencing. Face to face interaction is a challenge in current situations. We don't really know what we are going to miss, but we need to think and work differently in times to come and be inspired by the pandemic. The students can communicate and help the families of COVID victims. This experience in itself is a good exercise to learn empathy. She further opined that the timeline in medical education is arbitrary. It's the need of hour that the academicians should think what they want the health care providers to be and impart the teaching accordingly.

Prof. Madalena Patricio, from Portugal opined that students can be made aware of empathy, vulnerability by exposing them to such scenarios and asking them to reflect upon it. They can be taken to outreach visits like to Old age homes. The students can be empowered to reduce people's vulnerability and improve resilience. Preparing our students to be the change agents in society is vital.

According to **Prof. Ciraj Ali Mohamed**, India, learning soft skills is a must in health science professions. Unfortunately, most of the curricula have not addressed it since decades. But now, many interventions viz AETCOM (Attitude, Ethics and Communication) have been incorporated in the curriculum of medical course, in India.

Prof. Gordan stated that technology has enabled us to deliver education through Distance Learning. One should now workout on the utility, feasibility as well as challenges of using Distance learning platform. Students of this generation are creative and they can find a learning method best for them. He further commented that it's challenging to teach soft skills, eg. values, empathy, taking the patient's history through virtual mode. Hence, we need to get the right balance. He supported Dr. Jeanette that in education, there should not be fixed timelines. Currently many of the long duration courses lack flexibility. Some students mature rapidly even before the end of course. The maturity of the student at the entry level, later how he/she goes through the course and becomes competent is important.

Prof. Kamila, UK mentioned that the COVID crisis has influenced the traditional teaching-learning methods greatly. We need to take this pandemic as an opportunity to be creative in choosing the right and appropriate way to enhance learning. It's good that the global community through collaborative learning can come together, share the learning resources and experiences. Prof. Mathew added that the pandemic has taught us to learn from each other and help each other. This is the right time for promotion of bioethics education too.

Dr. Stacy Gallin, Director, Center for Human Dignity in Bioethics, Medicine, and Health, Misericordia University, Dallas, PA expressed that this is a good opportunity to highlight the positive interaction and cooperation with the global community. She opined that, it is our responsibility to educate medical students about dignity, solidarity, physical distancing ,...etc when we are dealing with covid. She also talked about the possibility to utilise these experiences to facilitate better learning.

Dr. Vedprakash Mishra, India commented that the process of medical education has to be dynamic. He mentioned the Flexner's report and Lancet commission report as evidence. He further added that the jolt of this pandemic has made us think all afresh again. We need to work out a model that is a judicious mix of traditional practice and newer innovative methods which can be used on a long-term basis. Virtual modality may be effective in the domain of learning soft skills, if used diligently.

Ms. Alaa, the student's representative expressed that she got a satisfactory answer to her queries. She was in agreement with the point that the medical students should be involved in voluntary capacity. She witnessed that the involvement of the students, postgraduate residents, and other healthcare providers in containing the health crisis varies across the countries. How strong the health system of a country is, how much resources are available etc, are the points that are considered for policy and guidelines making. She further opined that educational institutions need to develop infrastructure for virtual and online learning. There is a room for collaboration to strengthen the medical education system, to maintain resilience as well as be prepared for the response to future pandemic.

Prof. Mathew concluded this first session with a remark, that both students and patients are precious. Hence, the teachers cum clinicians are accountable to protect them and address their needs.

Session 2. Technology and Medical Education Interface

(Moderator: Dr. Animesh Jain)

Dr. Animesh Jain, the moderator began with the second session stating that, since the onset of COVID pandemic, the technology has been used extensively to carry out teaching-learning across the globe. He put forward the question, 'What are the opportunities and challenges of using technology based methods for providing medical or ethics education?'

Dr. Ming, China informed that they have learnt a lot from the current COVID pandemic as well as the SARS epidemic, which occurred 17 years back. He mentioned about the reforms done in medical education in the form of the addition of the public health component. It is helpful in the context of controlling chronic diseases like Cancer. He also proposed the need for strong collaboration between the frontline healthcare providers and the laboratory scientists.

Ms. Alaa shared that she had no experience of learning through the online mode earlier. Having online teaching-learning is important to keep the students continuously engaged and build up the knowledge base. She further opined about the challenge for online learning that not all the students can afford or have access to use technology for their learning. Given the choice, the students would prefer for face to face teaching-learning.

Dr. Jain asked the panellist, how to ensure that technology enhanced, long distance education to be of high quality? **Prof. Gordan** replied that education is a social science and needs to be looked at critically. making teaching of high standard through online mode.

It is challenging to gather the evidence on effectiveness and quality of different Teaching-learning modes, in medical education. Distance Learning mode seems to be practical, feasible and self-evident. However, it has limitation in teaching certain topics like attitude, empathy, ethics, anthropology ... etc

Prof. Pinsky was concerned about the variability regarding the available resources and technology across the world. She stated that the global leaders in medical education should join hands, work together, collaborate and share the technology, resources.

When asked, what opportunity does this pandemic give for collaborative learning, **Prof. Ciraj** mentioned about the hierarchical paradigm in medical education in India. He said that at some academic institutions, post COVID, a rapid response took due to shared leadership in local decision making. But the change would not occur overnight across the globe. He also emphasised the need to bring in more inter-sectoral education.

Prof. Jeanette opined that we had always believed that we need face to face contact for teaching. But, online teaching-learning activity will help now to build an e-learning community, provided all have access to it. In many ways we can expand teaching- learning ability through the virtual mode. However, it is always important to sit and spend some time with students, in order to inculcate soft skills.

Prof. Patrico, pointed towards some of the challenges of technology-based distance learning. She mentioned the technical requirements of distance learning, putting the pressure and responsibility at both teacher and learner end. Secondly online distance learning cannot be just a passive transfer of information. Medical education is related to the human body & science. The students need to have critical thinking. Through imbibing medical education, we need to develop future doctors.

Dr. Abhijat Seth, when asked about the possible effect of pandemic on Diplomate of National Board training in India, informed that there are around nine thousand postgraduate seats under DNB. The current COVID pandemic has delayed their academic calendar by almost two months. He further mentioned that they can't compromise on the training part and is essential for them to

maintain the quality of the program. Hence, they also restructured their teaching-learning activities for strengthening. He further said that training has two major pillars - Knowledge and ability to practice. Under such crisis situations, the knowledge can be acquired virtually through different platforms but for developing an ability to practice, one needs exposure, experience, supervision and clinical insights. Virtual simulation can be used to some extent. However, new sets of ethical dilemmas may arise due to new approaches in training.

Prof. Trevor was asked about the possibility of inequality amongst developed and developing countries in the context of the Medical Education system and ways to bridge the gap if any. He commented that we are dealing with a newer generation of the students and the generation of leaders may not match with it leading to a gap. Secondly, to address the inequalities, a strong coordination and collaboration between the developed and resource limited settings is required.

On being asked about the scope of assessment in online delivery of courses in the current crisis, **Dr. Vedprakash Mishra** stated that there is a scope of using online mode of assessment and diligent use of Information Technology, to compensate the loss happened due to COVID. Again, with regard to assessment modality, we need to have a judicious mix of both online and onsite/traditional assessment modality. He further mentioned about the need to work out the *scope, relevance, use, modality for incorporation* of virtual learning in current competency based medical education, in India. He also wished to have a consortia approach to be followed by academic leaders for better collaboration and policy framing.

Prof. Gordan added that, further, the assessment tool used in online platforms should be valid and flexible. It should be measuring what we need to measure, especially the long term competence of the students to be looked into.

Dr. Jain later enquired to **Prof. Pinsky** about scope for incorporation of assessment modality of USMLE for proposed online assessment during COVID crisis. Prof. Pinsky informed that, in the last several days they had a lot of high level meetings regarding the whole examination process. Rapid and short term design are being discussed. He further emphasized that we need to be assured that standards of education are maintained, as we are accountable for that.

Dr. Gibbs, commented that we are in the transition period and should learn from the situation. We need to be sure about what we want to achieve from the online assessments. He further emphasized on the implementation of longitudinal programmatic assessment (not exam basket) methodologies. **Dr. Jeanette** is concerned that we are dealing with adult learners. One should focus on formative and workplace based assessment. We need to look at opportunities to expand ways of assessment and critical standards. **Prof. Kamila** emphasised on the need to take regular feedback from students. Prof. Ciraj mentioned that we had the provision of online Teaching-learning and assessment since a long time, but we never utilized it maximally. He also pointed to the need for continuous programmatic assessment. **Prof. Kamela**, concerned about the possibility of unfair means by students during online assessment. Prof. Abhijath mentioned the need of going systematic, stepwise for transition of traditional to newer innovative online approach. Prof. Ming wished to have a solid collaboration and student interaction programs for medical education amongst countries.

At the end **Dr. Shiv Joshi**, postgraduate student, highlighted the salient points discussed in panel discussion. He agreed on the need for using innovative means for teaching, learning and assessment while maintaining its quality and standards. He reaffirmed on the thought given by Dr. Mishra that, we need to have a right balance and judicious mix of both conventional and newer modalities.

Dr. Animesh Jain, Dr Mary Mathew and Prof. Russel gave concluding remarks and thanked the panellists and participants for their valuable inputs and contribution.

Webinar Summary

Ethics of the Humanitarian and Social Aspects in Responding to COVID -19

Sunday 26th April 2020; GMT +0.50; 5:00 PM (India)

Webinar Lead and Chair: Prof Russell DeSousa, Chair, Dept of Education, UNESCO Chair of Bioethics, Australia.

Moderator & Compere: Prof Mary Mathew, Head Indian Program of the UNESCO Chair of Bioethics, India.

Panellists:

Prof. James J James, Exec. Director, Society for Disaster, Medicine, and Public Health, USA.

Prof. Kamila Hawthorne, Head, Graduate Entry Medicine, Swansea University, Wales, UK.

Prof. Ravi Wankhedkar, Treasurer, World Medical Association, India.

Prof. Joachim Osur, Dean, Medical Sciences, Amref International University, Kenya.

Prof. Rajan Sharma, President, Indian Medical Association, India.

Prof. Unni Karunakara, Shinhan Distinguished Visiting Professor, Yonsei University, South Korea.

At the outset, Prof. Russell introduced the distinguished panellist and the topic for discussion. In opening remarks, he mentioned that, currently the world is witnessing 'Global Humanitarian Emergency' and there is a breakup of the structures providing safety and security to the population. It's vital to uphold fundamental ethical principles in such scenarios. The COVID-19 pandemic has affected all segments of the population especially the vulnerable social groups such as poor people, homeless, refugees, migrants, persons with disabilities, and displaced persons are suffering disproportionately due to pandemic and its aftermath.

Recognizing and protecting social solidarity is more important than ever in this unprecedented time. Unfortunately, the poor people have only two choices...either dying of hunger or from infection. Hence, the government needs to ethically engage with the affected communities and be accountable to them. Exclusion and stigmatization of the vulnerable is a critical issue and needs to be addressed.

As the world races to respond to the global outbreak of COVID -19, it is vital that we keep the views, rights and dignity of people at the forefront of our work. Human dignity is the essence of the core humanitarian standards. Humanitarian organizations should work collaboratively with civil society in response to the pandemic. The people should have access to all essential social and health services without discrimination.

The current global pandemic is an unprecedented situation where the survival resource of the world's most vulnerable people is their social networks. Social connectedness is the first source of help and support for vulnerable populations, particularly in crisis. Social network in itself has now become a threat that might be compromised further due to pandemic.

All these issues have massive implications for responses to the pandemic and may amplify the existing humanitarian crises. With this context, Prof. Russell put forth following key questions to be deliberated in panel discussion:

1. What are ethical and humanitarian implications of imposing a full lockdown?
2. What are the challenges and barriers in implementing lockdown and social distancing in humanitarian settings?
3. What are the alternative and humane approaches to managing COVID 19 in humanitarian settings?
4. What is the role of government in times of stress, financial distress where there is breakdown of social order, families, law and systems?

Prof Russell called on Prof. Marry Mathews for moderation and further proceedings.

In response to Dr. Mary's question around ethical and humanitarian implications of lockdown done in responding to the COVID 19; Prof James who belonged to the Military and also witnessed the anthrax outbreak shared about the two distinct views - 'Individual medical views' by private health care practitioners and another one is of 'Public health and population health views', both having different conclusions. Medical healthcare system is not able to do the job they are supposed to deliver due to various reasons. From Population perspective, the full lockdown has a social and economic impact that varies across regions/states. He further opined that there is no fixed definition or criteria for 'Full lockdown'. Secondly, one needs to look for strong and enough evidence to answer if lockdown as an intervention is effective? Even among the countries which have implemented physical distancing it, there is no consistent pattern. Hence, such restrictions or interventions should be practiced but at a far lesser cost to society. Prof James further shared that the only history where some parts or regions of the USA had a complete lockdown was the 1918 influenza pandemic. However, keeping quarantine healthy people needs careful scrutiny from ethical and legal viewpoint

Prof Unni from South Korea shared that South Korea did not have a lockdown. South Korea acted early, focused more on improving access to testing, contact tracing, quarantine and isolation (even if the test is negative) were key strategies that worked. Prof Unni said lockdown is a blunt instrument. Rigorous contact training is far more effective than the complete lockdown. Further what worked well in South Korea was their culture is to maintain the distance. Government was transparent from the beginning and the community has a certain level of trust in the government. This is seen across the country, and in some other countries as well such as Taiwan and also in the state of Kerala in India.

Prof Mary also shared that in addition to trust on government, Kerala state of India has a recent experience of dealing with the NIPAH virus and those experiences helped the government in response to COVID 19 as well.

Prof Kamila from the UK shared that social distancing was more effective than the full lockdown. In the UK, the leader himself was infected, was serious one time and now is back to office. The government and organisations allowed people to work from office if necessary and encouraged people to work from home. NHS rose to the challenge to the COVID 19 crises and responded well.

Prof. Joachim from Kenya informed that in Africa, many countries are in very early stages. As soon as one case is diagnosed, the government enforces containment measures. Africa is different from the other countries, due to already being in humanitarian situations due to political issues, social reasons, flood and calamities etc and a weaker health system. COVID response in Africa needs contextualisation and needs different approaches compared to developed countries. However, the great concern is that, in Africa, countries are replicating what is done in the west even if the single case is detected, which may have a negative impact in countries who are already under humanitarian situations. Weak health systems can further break down and leading to collapse of other basic essential health services, e.g. immunization, antenatal care, Tuberculosis control etc. African countries are already managing the cases which are life threatening and therefore need to contextualize the intervention

Dr. Rajan from India opined that, in India, lockdown was the only possible way to prepare the population to respond to COVID-19, as the situation was unfolding. The options like testing the entire population and/or vaccination may not be feasible. Moreover, any amount of effort on medical equipment and drugs will be challenging in India due to the huge population. So, the country needs to have a practical solution. India is able to reduce the transmission to a significant extent due to lockdown.

Prof. Unni shared that South Korea has seen a resurgence of cases in the last few days and therefore suggested the need to ramp up the testing. Equitable access to testing, protection material and other supplies etc. is the key for response to COVID crises. He further stated that testing doesn't imply universal coverage. What we need is the enough coverage of testing and access to quality testing services. Usually high risk vulnerable individuals are least likely to have access to these needful services. One needs to believe in government and be disciplined at individual level.

Prof. Ravi Wankhedkar from India shared that any pandemic is a humanitarian crisis and social discrimination, mass hysteria will always be there during and after pandemic. Discrimination against the specific community / group of population are often seen and may pose a significant challenge in addressing the pandemic crises. Social discrimination is seen in both rich and poor countries. In India, even doctors and health care providers who are on one side called as 'Corona warriors' are facing challenges due to social discrimination. Prof Mary shared in India doctors are evicted from the quarters in India due to fear. Two incidences from India where after the death of the doctor, villagers were not allowed to bury the body. However, Government of India has proposed a stringent punishment enforced for assault on health care workers who are working round the clock the COVID crises. Social media influences community thinking, rationality, memory and likely to have an impact on the response to COVID crises. Onus of response to COVID 19 is totally shifted on the community by government in India

However in Africa, Prof Joachim shared that not much violence against doctors or Health Care Workers (HCW). However, HCW are feeling insecure for lack of Personal Protective Equipments (PPE) and are feeling at risk of COVID. They may go on strike due to lack of PPE.

Prof. Marry later raised the issue around 'inequity'. She asked 'Why are people so comfortable with inequity?' She also shared stories from India where vulnerable and poor are more at risk and are also affected. In India, due to lockdown the reverse migration began and migrants were walking long distances, in some cases even more than 200 km to their native villages without food and water. Dharavi in Mumbai is one of the largest slums in Asia, where people are living overcrowded, without sanitation and water facilities. It is very challenging to follow physical distancing norms in such situations.

Prof Joachim said in Africa, where they have complete lockdown, people getting out on the street and looting. Many people are hand to mouth and are currently left with no jobs, no money, no food. Government is trying to provide food and money. Due to limited water supply and financial distress physical distancing and maintaining personal hygiene is a significant challenge. In slum settlement water and sanitation is also a big problem. They need to buy water. COVID 19 crisis has a negative impact on availability and access to other essential services, such as safe delivery, malaria, tuberculosis etc. This is likely to have severe economic, medical consequences in future. Moreover, in Africa, human freedom is also at stake, especially for vulnerable populations. Civil society organizations and donations may be helpful, however How sustainable is the donation?

Prof Kamela from the UK shared that the country has taken very special measures such as housing and protective accommodation for homeless people and the aged population. Older population is very vulnerable and has a lot of challenges in dealing with these. NHS staff are also at risk of infections and are dying as well.

Prof Uni mentioned that we used to say that Ebola affected west Africa more because of various reasons such as poor health care system, poverty and other social and political problems. However, COVID 19 showed that a well resource system may fail due to a variety of reasons. In response to COVID 19, protecting HCW, reaching the vulnerable people and improving the access to testing and care services is the first level of business.

The next issue discussed was for the panellist was about the other possible alternative and humane approaches to make the situation better.

Prof. James shared that globally around 210 countries are facing the COVID 19, however the governments are worrying for their own population/ countries. We need to have a global and integrated effort to effectively respond to the COVID 19 crises.

Prof. Kamela also supported Prof. James' view of global response. She further added that we have limited knowledge about how this virus behaves and how it will change itself in future. We need to educate and create awareness among the public to reduce the fear.

Prof Joachim informed that, in Africa, most of the countries adopting the intervention that developed countries are implementing. What else can we do to address COVID crises in Africa is a larger question and need to be addressed differently as most countries in Africa are already facing humanitarian challenges, even before the COVID 19 crises. Africa needs short term and long-term strategies which may include integration of services for tackling resurgences of other diseases and COVID; effective risk communication and community engagement approaches to continue protecting groups with high risk or mortality etc. In Africa, countries need to build the trust between community and health care system, communication system at family level and between health systems and trust of Community health workers or frontline health workers

Prof. Ravi, was also in agreement for the need of a global response which is contextualized locally for dealing with the current COVID 19 crises.

Role of herd Immunity in COVID 19

Prof. James mentioned that today we have very little idea about the ratio of susceptible to non-susceptible population. Moreover, a large proportion of the infected population has no clinical manifestations. How many people are exposed need to be answered before the herd immunity approach? Most infections required more than 80% levels for herd immunity.

Prof. Unni also raised the ethical aspect of achieving herd immunity by letting people exposed to disease. In India, the demographic profile of the population, less proportion of elderly people may be the reason for considering the herd immunity approach to address COVID crises. However, shielding as well as exposing specific subgroups of population groups has both risks as well as benefits. For example, shielding vulnerable people at one place may be a risk as well if the virus is introduced in this place accidentally. In Kerala state of India, we have started seeing our communities having some agency that they can protect their family members.

Prof. Ravi, agreed with another panellist for discussion on herd immunity. He further expressed his concern that the huge population getting exposed to infection may result in more people infected with risk of serious disease and dying, which may be a disaster in a country like India. If the herd immunity approach is a poison pill or a good pill, is a million-dollar question and we have no answer right now. Few isolated studies in other countries have found out a seroprevalence rate of around 30%. However, for herd immunity we need seroprevalence of more than 70% prevalence.

Prof Joachim also expressed that antibody testing is really important for herd immunity and there is a need to work on vaccines.

Moving on, Prof. Russell put forth the question 'How can we enhance social solidarity (one of the principles adopted by countries).'

In response Dr. Mary replied that, in India, when the Tamil Nadu state was facing the COVID problem, the Hon'ble Chief Minister of neighbouring state Kerala extended a helping hand. and expressed the wish for everybody to be safe and free of disease.

However, Prof. James stated that it is extremely difficult to achieve solidarity and integration, if the population group is diverse with different ethnic groups having their own social habits. At global level, several months from now we are going to talk about the global effort, not a blame game, but to come together, build interactions between countries and then countries to act at local level. Media created a narrative by showing the incorporated figures and stories that created a global bed of fear and lead xenophobic policies.

Prof. Unni further opined that the conditions do not exist at the moment for global coming together for the crises. We are divided. High income countries have not even figured out what to be done. Currently, what we can see, a regional solidarity – African, Asian etc. Global consensus on resource sharing is essential and somewhere the instrumentalizing health / pandemic for the political purposes must be stopped. IT has nothing to do epidemiologically.

Prof Joachim mentioned COVID has made no distinction between the rich and poor countries, North Vs South. Somalia contributed doctors to Italy. Africa can contribute in many other ways with others. Countries in Africa have learned many lessons to share with the rest of the world. The south has experiences in managing Ebola outbreak, effective community engagement.

Prof. Russell further opined that a new outbreak is inevitable unless other reasons are dealt with. We are only safe as the most vulnerable amongst us globally. Equity and public health go hand in hand. Rich and poor does not matter. Hence, solidarity is a global issue.

Prof. Kamela summarized that this panel discussion was very much enlightening and this is what's needed is to know what's happening in various countries across the globe. She further said that from Top to bottom, each and every individual is playing an important role in combating COVID crisis.

Poem

Cadaver's Appeal

Ayush Anand

4th year MBBS Student and Head, Student's Bioethics Wing, B. P. Koirala Institute of Health Sciences, Dharan, Nepal.

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O' my dear,
Show respect,
For I am your friend and a silent teacher,
You will never regret.

Don't name me O' my dear,
I also had a life,
Before I was here,
Alive and breathing as you are,
A name of my own,
With dignity as anyone,
Till life had a test,
Which put me to rest.

Respect my memories,
O' my dear friend.
Even after death,
Lying on the table supine,
My bones and flesh all for you,
My life after death devoted to you.
Get hold off all within me and my presence,
For the knowledge you gain will be of usance,
for years to come and much beyond.

You are welcome to dissect,
But don't undermine my respect.
Live and dead both have cells,
Treat me well,
For it is a reflection of your future self.

The scholars say, I have survived the test of time,
Unparalleled to any education tool procurable to mankind.
For I preserve life science even in death,
Be grateful and show reverence.

No one can be more alive than me after they die,
Only a cadaver brought back to life by formaldehyde.

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3. Personal author(s): Ringsven MK, Bond D. Gerontology and leadership skills for nurses. 2nd ed. Albany (NY): Delmar Publishers; 1996.
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