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Editorial: Looking Beyond Disaster at the Boundaries

- Darryl Macer

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One of the programmes of Eubios Ethics Institute is Youth Looking Beyond Disaster (LBD) Training programmes, and from 12-15 April we will hold the tenth forum, this time in Istanbul, the boundary between Europe and Asia. The LBD program enhances our effectiveness for disaster reslience. Disasters have no boundary. We invite all readers to the forum. We will also have a further forum in July or August in USA.

I also have the pleasure to announce the publication of the recent book from Eubios Ethics Institute, *Philosophy and Practice of Bioethics across and between Cultures*, Editors: Takao Takahashi, Nader Ghotbi & Darryl R. J. Macer, which includes over twenty papers from the Kumamoto Bioethics Roundtables. Later in 2019 we will start a series of Tohoku/Sendai Bioethics roundtables, so please keep an eye out for the announcements on the websites.

In this issue of the journal we have 8 papers, to fllow on the ten papers in the January 2019 issue, both with extended number of pages because of the increasing number of submissions. We welcome more papers, and there may be some more discussion of the gene editing ethics featured in the Bangkok Statement in the January 2019 issue and accompanying papers.

In this issue there are a range of bioethics issues included, from reproductive services and health care to end of life care. We offer perspectives from different countries and different groups of persons.

Juichiro Tanabe presents a holistic model for peace, Buddhism and post-liberal peacebuilding: Building a holistic peace model by interconnecting liberal peace and Buddhist peace, at the start of the issue. The scope of bioethics as the love of life must include ways that we can make peace not only with our own decisions, and the client-professional relationship, but also within and between societies.

- Darryl Macer

Buddhism and post-liberal peacebuilding: building a holistic peace model by interconnecting liberal peace and Buddhist peace

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Abstract

This paper examines a post-liberal hybrid holistic peace model that interconnects liberal peace and Buddhist peace. Following the critique of liberal peace in the postliberal peacebuilding, there has been a rising urgency to build a complementary relationship between the liberal peace thesis and non-Western vision(s) of peace. This research seeks to be an exemplar of that by constructing a hybrid peace model that combines Buddhist peace and liberal peace. While liberal peace represented by democracy, human rights, and market-oriented economy is structurally and institutionally oriented, Buddhism has developed internal dimensions of peace. This paper explores how Western structurally and institutionally oriented liberal peace and Buddhist inner peace characterized as the practice of multiple functions of mind, reflective self-awareness, non-dualistic thinking and compassion to empower humankind internally, can complement each other to offer a post-liberal hybrid holistic peace model.

1. Introduction

The critique of liberal peacebuilding as the imposition of Western values upon post-conflict zones has raised the urgency to build a complementary relationship between the liberal peace thesis and non-Western vision(s) of peace in post-liberal peacebuilding. Peacebuilding requires both the wisdom of Western liberal peace and that of non-Western zones. This research seeks to offer a hybrid peace model that integrates Buddhist peace and liberal peace. The paper begins with the hallmarks of liberal peace, its critique and the background of the emergence of the concept of post-liberal peace.

The second section analyzes the Buddhist view of conflict dynamics and its inner peace. Here, the empowerment of individuals with the multiple functions of mind such as reflective self-awareness, non-dualistic thinking and compassion is offered as Buddhist inner peace. The third section of this paper examines a holistic peace model that interconnects the spirits of liberal peace and Buddhist inner peace, with a critical analysis of the core themes of liberal peace - human rights, democracy, and market-oriented economy - from a Buddhist perspective. First, the analysis demonstrate that Buddhism stands by human rights principles; that is, the inherent dignity and equality of all humankind from the perspective of the doctrine of the Buddha-nature. Second, the analysis proposes a complementary relation between democracy and inner peace. It will be claimed that democracy as free and constructive public dialogue and deliberative interaction of political thought and empowerment of citizens with reflective self-awareness, non-dualistic thinking and compassionate mind complement each other to strengthen democracy itself. Third, the examination will demonstrate that despite a cautionary stance towards market-oriented economy, Buddhism acknowledges economic well-being as crucial to internal enrichment. An economic system that ignores human dignity and deprives citizens of their spiritual and philosophical development cannot be recognized an an authentic system. An authentic economic system in post-liberal hybrid holistic peace would be the one that contributes to spiritual as well as material wealth based on the principles of social justice and equality.

The paper will conclude with the proposition of postliberal hybrid holistic peace formed by four elements: the promotion of human rights; the promotion of dialogical and transformative democracy based on selfcritique and mutual learning; sustainance and furthering of the economic system, philosophical and spiritual fulfillment of citizens based on social justice and equity; and inner peace characterized as reflective selfawareness, non-dualistic thinking, multi-perspectival approach, and compassion.

2. On liberal peacebuilding 2.1. Hallmark of liberal peace

Liberal peacebuilding founded upon the liberal peace thesis has assumed a central role in contemporary peacebuilding enterprise in the post-Cold War era (Newman et al, 2009). The liberal peace thesis posits that states which employ democracy and develop economic interdependence based on free trade, secure stable domestic politics and peaceful international relations (Richmond, 2014). The advocates of liberal peace claim that democracy and free-trade economic interdependence guarantee national, regional and international order and stability.

International community managed mainly by liberal states has come to connect peace and security with market-oriented development, democracy, rule of law, human rights and a vigorous civil society (Richmond, 2005). Underpinned by this liberal hypothesis, liberal peacebuilding that seeks to promote democracy, human rights principles, and market-oriented economic reform for a lasting peace (Newman et al, 2009) as the transfer of liberal systems would empower people to resolve their differences of interests, goals and values nonviolently and make governments accountable and responsive to peoples' needs.

2.2 Critique of liberal peace and rise of post-liberal peace

However, liberal peacebuilding has been critiqued for its standardizing, and universalistic pretentions and its concomitant failure to engage with local cultural practices of peacemaking and conflict resolution and with the manifold insecurities of everyday life in local societies (Selby, 2013). Following the critique, culturally and locally oriented peacebuilding have been proposed for post-liberal peacebuilding as local culture has valuable knowledge and methods to achieve durable and stable peace.

However, another hallmark of post-liberal peace is that while cultural and local wisdom should play the main role in peacebuilding enterprise, it needs to be acknowledged that neither liberal peace nor locally or culturally oriented peace framework can achieve a sustainable peace alone. Rather, what is required in postliberal peacebuilding is to deconstruct binary or dichotomous thinking of either liberal peace or locally or culturally framed peace as the absolute foundation for a lasting peace. The core of post-liberal peace is a hybrid peace recognizing that both liberal peace ideals and culturally-oriented peace visions are indispensable (Richmond, 2011). It is a reframing of peacebuilding enterprise as a dialogical and pedagogical process in which liberal peace ideals are creatively modified in distinct cultural contexts to contribute to positive transformation to pave the way for a durable peace. Stated otherwise, post-liberal hybrid peacebuilding is to deepen inter-cultural or inter-civilizational dialogue that aims to learn from each other and co-construct a sustainable peace through an equal and complementary relationship.

And this research stands by the ethos of post-liberal hybrid peace vision that builds a complementary relation between liberal peace and Buddhist peace. Though Buddhism has developed its own peace theory, it engages a dialogical and mutually learning process with liberal peace thesis to build a hybrid holistic peace ideal for future sustainable peace.

3. On Buddhist inner peace

3.1. Buddhist view of conflict dynamics

Though many scholars including Oliver P. Richmond, David Chandler, Roger Mac Ginty, Michael Pugh, to name but a few, have developed the critiques of liberal peace and explored post-liberal peace visions, on a Buddhist view, the problem of liberal peace thesis is that it is highly structurally and institutionally oriented and the human inner dynamics of peace has been underdeveloped.

The main focus of Buddhism is human mind, which is stated in the Dhamapada: "All experience is preceded by mind, led by mind, made by mind" (Fronsdal 2005: 1). The Surangama Sutra states: "The Tathagata has always said that all phenomena are manifestations of mind and that all causes and effects (all things from) the world to its dust, take shape because of the mind" (Luk, 2001: 16). These statements do not deny the existence of objects outside our minds. What they imply is that the qualities and conditions of the world are dependent on the conditions of our minds (Lai, 1977). They also show that the root cause of problems facing humanity including conflict and violence is attributable to mind and that at the same time inner serenity and well-being can be achieved by human beings themselves. In other words, the main focus of Buddhism is epistemological; that is, how our way of knowing and understanding reality affects peace and conflict dynamics. It does not deny social structural dimensions of peace. Rather, what this research seeks to demonstrate is that while social and structural causes and conditions for peace must not be ignored, critical analysis of human epistemology and the development of inner peace and empowerment of individual citizen through the development of internal dimension of peace could broaden the purview of our understanding of peace.

In a Buddhist view, one of the main causes of conflict and violence is the belief and enactment of our values, worldviews or perspective as absolute or complete. From time immemorial, human beings have developed conceptual thought or linguistic knowledge as a tool to make sense of the reality of the world and communicate with fellow human beings (Ichimura, 1997). We inhabit socially constructed and historically evolved and succeeded life-worlds that form cultural patterns – identities, beliefs, values and norms – as scaffolding for meaningful experience (Reysen and Katzarska-Miller, 2013). We build certain frame of references – patterns of worldviews, cultural values, political orientations and ideologies, religious doctrines, moral-ethical norms and paradigms in intellectual enterprise, to construct a conceptually framed reality and lead a meaningful life.

However, while constructing the frame of reference social or cultural conditioning is essential to make sense of reality, Buddhism argues that the fundamental problem with the construction (of frame of reference) lies in our propensity to privilege our frame of reference as absolute or complete and in the reification of understanding of reality and the objectification of the other (Zajonc, 2006). The belief in the universality and completeness for the frame of reference causes us to be dogmatic and exclusive of other views and thoughts (Ramanan, 1978). The extreme attachment to certain views and values elapses into polarity or negation of other views, values, and ultimately of people who are different from us.

The belief in absoluteness and completeness of our frame of reference also causes us to be predominated by the dualistic thought as the only way of thought. Dualistic thought is informed by the principle of the excluded middle (Nicolescu, 2006) or "either-or" stance (Nagatomo, 2000). As the dichotomous relationship between in-group and out-group founded upon the dualistic thought becomes sharpened, an imbalanced attitude invested by extreme in-group self-interest, desire, and needs is favored and promoted at the expense of others.

When we become disconnected from others as a result of dualistic or dichotomous thought, it becomes easier to propagate violence of any form upon those outside the boundary. In a dualistic logical and epistemological structure, we tend to project negative qualities upon the outside and see those objectively belonging to them, which promotes self-righteousness and leads to a discriminatory attitude and behavior. The mind in dualistic stance swings from extreme to extreme, and sticks to dead-ends, whereby values, ideas, or norms of our own are not viewed as one of many alternatives, but the only right one: Other possibilities are dimly conceived or denied as wrong or inferior (Wade, 1996).

Though building a provisionally coherent thought system is an inevitable part of human life, it causes us to exaggerate differences between people and create supposedly firm and fixed boundaries between the ingroup and out-group because a dualistic thought mode exerts control on our frame of reference. Forming sedimented ways of seeing the dynamic and complex reality with fixed perspectives restricts the patterns of awareness and limits our intentional range and capacity for meaningful commitments (Hershock, 2006), which then impedes a constructive communication between those having different frames of reference to address

complex global and local problems including conflict that requires those having different values, perspectives and goals to cooperate (Nicolescu, 2006). Whereas social or cultural frames of reference and dualistic logic foundation form a natural process in developing our understanding of reality, it becomes the crux of the problem for its very nature.

3.2. Buddhist inner peace model

As the mixture of an absolute belief in a frame of reference and dualistic thinking constitutes conflict and violence, the path to inner peace is to control our own mind dynamics and overcome extreme attachment to a certain thought or frame of reference.

The first aspect of Buddhist inner peace is the practice of reflective self-awareness. Reflective self-awareness is the practice of stepping back from our current frame of reference to critically examine our pattern of thought, values and logics that shape our experience (Park, 2008). When completeness or universality is claimed for a certain frame of reference, it causes us to be dogmatic and exclude other views or thoughts. Dissemination of a certain philosophical framework as absolute or complete in the life-world becomes the constitutional power of institutional violence in human social and global arena (Park, 2008).

Reflective self-awareness helps us to recognize that all ways of thinking and knowing are socially or culturally constructed, contextual and contingent. Through awareness, we learn to know that alternative ways of thinking and knowing are available and learn to be open to others' views, values and norms to explore more inclusive ones. The development of self-knowledge through reflective self-critique of our frame of reference generates pliability and flexibility with thoughts (Schliz et al, 2010). We can sharpen the capacity to simultaneously hold multiple perspectives and patterns of thought with an awareness that embraces all perspectives without adhering to a position in any form as complete to approach the reality (Hart et al, 2000). The practice of meta-cognitive awareness like reflective self-awareness stimulates worldview transformation since it can bring us back to square one, from which revision of our model of the world becomes possible (Schliz et al, 2010). Learning to hold a belief as the best working hypothesis we have at the moment, and being consciously willing to change the belief system or thought mode according to different circumstances, enhances the ability to appreciate and explore multiple viewpoints and find comfort in unfamiliarity. By integrating reflective self-awareness into our intellectual and practical enterprise of peace and raising the conscious awareness present in them to engage in constant critique of our assumptions, the possibility of transcending a particular belief system and approaching the world from multiple perspectives will be a viable reality.

The second aspect of Buddhist inner peace is the practice of non-dualistic thinking. Non-dualistic thinking means to understand the interdependent and interpenetrating nature of conceptual thoughts framing different views and understandings of our reality. While the logic of the excluded middle staticizes and fixates differences or oppositions, non-dualistic thinking sees

them as dynamic relationality and temporal phenomena (Hershock, 2012) whereby opposing prima facie views and perspectives are not seen as a hardly fixed pair of opposites but as inter-relational and interpenetrating constructs. This refers to neither total erasure of difference nor demise of all distinctions into all-frozen sameness. Rather, it transforms how we view differences and oppositions beyond dualistic understanding.

With the recognition of a dependent origin in the nature of a conceptual or linguistic frame of reference, we learn to understand that any form of symbolic knowledge shaping dichotomous relationship cannot be seen as existing outside the purview of interdependency (Muller, 1998). Non-dualistic thinking consciousness of the total and interminable conflict in conceptual thought or frame of reference claiming its absolute and complete status and the consequent recognition that the harmony of the world is a harmony of opposites and contradiction. The transcendence of dualistic thought empowers us to appreciate that the opposite of a deep truth is another deep truth and to hold multiplex and complementary both/and thinking (Braud and Anderson, 1998). Consequently, capacity for synthetic, integrative thinking and appreciation for the diversity of values and perspectives can be honed.

However, the proposition of non-dualistic thinking does not deny the logic of the excluded middle. Rather, the relationship between non-dualistic thinking and dualistic one is complementary and not mutually exclusive. By enacting both dualistic and non-dualistic thinking according to distinct circumstances, we can sharpen flexibility in our thinking and creativity in managing differences.

The third aspect is the practice of compassion. Originating from the Latin *co-suffering*, compassion is an acknowledgement of shared humanity and the commonalities in both suffering and aspiration among those having different identities (Pruitt and McCollum, 2010). It is to feel others' pain, sorrow, despair or suffering as our own as well as to have clear awareness of interdependent origination of any phenomenon (Hoyt, 2014). A compassionate mind inspires the development of a quality of loving kindness, a universal and unselfish love that extends to ourselves, to friends and family, and ultimately to all people (Pruitt and McCollum, 2010).

The practice of compassion means to practice unity-based worldview. The unity-based worldview is the consciousness of the oneness of humanity (Daneth, 2006). It is an awareness that our and others' well-being are interdependent and interpenetrating: Our own peace of any kind would be impossible to achieve without considering and acting to promote others'. It is a transition from self-centered and dichotomous tensions of in-group and out-group processes to an all-inclusive state of awareness of our fundamental interconnection.

The awareness of our fundamental interdependence does not deny the uniqueness or individuality of each of us. It is a qualitative transformation in the view of the nature of identity. Instead of seeing our identity as an independent and fixed entity with firm boundaries, there comes a perspectival shift to understand it as an interconnected web of life with no fixed nature. Realizing identity as an open and dynamic living system within a larger interdependent and interconnected system

inspires us to see that we cannot discriminate ourselves from the inter-relational web of life without damaging both others and ourselves (Loy, 1993). The recognition of fundamentally interconnected and interpenetrating nature of any human relation arouses a sense of responsibility to act in interdependent interconnected relations and drives us to try to gratify basic needs of all beyond group boundaries and promote justice for others as well as for ourselves (Daneth, 2006). This does not mean that all of us achieve the same wellbeing, basic needs and justice. It rather emphasizes that we become conscious of the interdependent and interpenetrating nature of different ideas and goals of peace, basic needs and justice and make a mutual contribution to help achieve each other's ideas of peace.

As represented by reflective self-awareness, nondualistic thinking, and compassion, the essence of Buddhist inner peace is the development and practice of multiple functions of mind beyond but including the social and cultural purview of thinking and knowing with a holistic view of reality. Undergirded by the enactment of multiple functions of mind, peace means a continuous, relationally-expanding and interdependence enriching process in which we experience differences or even opposition as an opportunity to mutual insight and inspiration to explore something new. In this view, at the core of conflict resolution and transformation and peace lies the necessity for the practice of mutual self-critique and transformation by those in conflict. In Buddhist view, conflict needs to be understood and enacted with interdependent and interpenetrating epistemology and consequently, a departure from dualistic or dichotomous approach and the practice of non-dualistic thinking must be at the core of conflict resolution or transformation and sustainable peace.

Founded upon interdependent and epistemology, peace is an ongoing exploratory and everlasting process that explicates new values and meanings to achieve and sustain interdependent and mutually liberating and transformative relational dynamics. Peace is not the suppression or elimination of differences or disagreements, but rather the readiness to accord with differing situational dynamics, responding without exclusive reliance on any fixed views and principles, in order to amplify and accelerate relationally manifest mutual appreciation (Hershock, 2012). Encountering diversity ultimately means valuing creativity; that is, significant innovation and relational transformation in the direction of unprecedented appreciated coordination (Herschock, 2012).

Accepting interdependent and interpenetrating epistemology, valuing diversity and participating in mutually transformative activities beyond the social and cultural framework would not be easy. However, since nothing is absolutely destined to be, there is no warrant to claim any situation in which we find ourselves to be intractable (Park, 2008). Rather, it needs to be acknowledged that human beings and socio-cultural frames of reference are complex systems that keep incorporating the histories of their constitutive dynamics into the continuously ongoing processes of their own environment and contextually responsive self-transformation and evolution (Hershock, 2012). As there is no closure of meaning-making, changing our values,

visions and actions is a possible reality to embody interdependent and transformative relational dynamics.

4. Exploring a complementary relation between Buddhist inner peace and liberal peace for hybrid holistic peace

As examined, Buddhist peace theory focuses on human internal dimensions. Empowerment of individuals with multiple functions of mind and a holistic epistemology seeks to promote peace as interdependence and transformation. Qualitative enrichment of human mind is at the core of Buddhist inner peace as increasing the number of citizens empowered with skills and abilities of multiple ways of thinking and compassionate and emphatic mind would contribute to filling society itself with self-conscious citizens capable of bringing about necessary positive changes.

However, the critical problem with Buddhist inner peace theory is that it tends to ignore the macro economic and political aspects that stifle people's ability and opportunity to satisfy their basic needs and pursue their envisioned life (Brantmeier, 2007). Inner peace presented could neither be appreciated nor applied to those without appropriate food, clothing, and shelter, as well as those without proper access to social services such as education and healthcare (Hershock, 2006). Though internal dimension of peace founded upon empowerment of citizens with multiple functions of mind beyond but including socially and culturally conditioned frame of reference is crucial, learning and employing the spirits of liberal peace would make peace more sustainable. How Buddhism understands human rights principles, democracy and market-economy will be examined.

5. Buddhism and human rights

The conventional view is that human rights is a Western value that has been disguised as a universal value and imposed on non-Western zones. However, this research disagrees with the view and claims that Buddhist inner peace needs the promotion of human rights and Buddhist teachings contain the spirit of human rights principles. Human rights are the rights that everyone equally has because she/he is a human being (Donnelly, 2013). At the core of human rights lies the ideal of inherent human equality and dignity. The promotion of human rights means the promotion of human equality, dignity, and worth inherent in all human beings, which enhances positive conditions for human development (Jeong, 2000).

Though Buddhist sutras or holy texts do not have direct links to contemporary ideas of human rights, certain ideals in Buddhist teaching show the spirits of modern human rights. One of the most conspicuous ideals would be the doctrine of inherent Buddha-nature. The teaching of the Buddha-nature means that all people regardless of social status have Buddhahood or divinity or precious nature and the potential to embody what the Buddha, the Gautama, was awakened to by liberating himself from suffering and spreading the wisdom and compassion to the society. It is widely acknowledged that the historical Buddha criticized the social discrimination and caste system of his age (Shiotsu,

2001), which is stated in Suttanipata: "People are not born base; nor are they born Brahmins. By their actions they become base, and by their actions they become Brahmins." The doctrine of Buddha-nature implies the natural rights concept of people being born free and equal. Being born free and equal, the Buddha-nature doctrine claims that all human beings have equal potential for self-realization even though the way to achieve self-actualization will not necessarily be identical (Shiotsu, 2001). The ethos of human rights underpinned by the principle of inherent equality and dignity of all human being beyond but including diversity of human characters is to be found in Buddhism.

What should be emphatically noted is that the enhancement of human rights helps to develop Buddhist inner peace. As explained, the core of Buddhist inner peace is the development and enacting of multiple functions of mind founded upon a holistic view of interdependent and interconnected nature of our world including different or even opposing conceptual or linguistic knowledge shaping our reality. It is qualitatively enriched human development not only physiologically, and psychologically, but philosophically and spiritually. However, without a proper external environment, it would be impossible for us to internally enrich ourselves.

The role of human rights is to secure the conditions that undergird the possibility of human flourishing and fulfillment (McCarthy, 2001). The promotion of human rights can create social conditions that help us sharpen the skills and abilities for multiple ways of thinking and knowing and a compassionate mind that appreciates the unity in diversity. Human rights and Buddhist inner peace form a virtuous cycle of building a harmonious and sustainable society. To guarantee human rights principles and social environment in which citizens can enrich their minds holistically would contribute to increasing self-reflective and transformative agents who further human rights more widely, which becomes a foundation for a sustainable society.

6. Buddhism and democracy

In line with human rights, the foundations of democracy are equal dignity and liberty of the citizens, equality before the law, and pluralism (Crick, 2002). Buddhism also contains the spirits of democracy. The early Buddhist community was open to all people beyond caste, class, ethnicity, culture and gender and its emancipatory and compassionate philosophy excluded none (Hershock, 2012). The Buddhist doctrine of dependent origination, that is, the teaching of interdependent and interpenetrating relationship also underpins the horizontal and symbiotic relationships between people having different backgrounds, values and views. This shows the basic compatibility between Buddhism and the principles of democracy.

While Buddhism acknowledges democracy as an ideal system, Buddhist inner peace and democracy can complement each other to strengthen democracy in realizing what it aspires to achieve. As Sen claims, democracy cannot be identified with majority rule and voting (1999). It entails multi-faceted requirements, which include voting and respect for election results but

also the protection of liberties and freedoms, respect for legal entitlements, and securing free discussion (Sen, 1999). Public reasoning is the core of democracy. In the broader perspective of public reasoning, democracy needs to guarantee free public discussion and deliberative interaction of political thought and practice (Sen, 2003). Democracy means to give citizens an opportunity to learn from each other and contribute to the construction of social values and priorities. Engagement in dialogue and accepting the change of one's viewpoint or adding new perspectives to one's original values and goals constitute the core of democracy.

Buddhist inner peace as empowerment of individual citizens with multiple functions of mind and complex view of reality can be of help in enacting democracy as public discussion based on value diversity and appreciation of change. What needs to be avoided is the attachment to any form of extreme position and belief in dualistic thinking as absolute. And free and constructive public dialogue requires its participants to possess the capability to transcend their positional confinement; for public dialogue to freely and creatively occur, there is a need for citizens to be capable of going beyond the limitations or the purview of one's positional perspective (Snauwaert, 2010). Empowered citizens with reflective self-awareness, non-dualistic thinking compassionate mind can become an autonomous and critical agent in a collaborative and dialogical context by overcoming the tendency to think and act uncritically on established ideas and views of others as fixed.

Political efficacy in democracy, that is, the capacity to engage in critical and transformative political action, is dependent upon cognitive, ethical and self-reflective capacities of citizens (Reardon and Snauwaert, 2011). Empowerment of citizens with multiple functions of mind facilitates the perception of a wider scope of systemic and dynamic inter-relationships with diverse values and interests, which creates space for the recognition of human dignity of all participants and moral inclusion beyond differences and more complex and integrative forms of reasoning. Beyond simple majoritarianism and balloting, democracy is not the suppression of differences or disagreements, but rather our readiness to accord with differing situational dynamics, responding without exclusive reliance on fixed views and principles to amplify and boost relationally mutual appreciation (Hershock, 2012). Democracy means valuing creativity; that is, significant innovation and relational transformation in the direction of unprecedented and yet meaningfully enacted capacities for appreciative coordination (Hershock, 2012).

Valuing diversity and participating in public reasoning for mutual transformation is not an easy task as we are not totally free of the influence of the social and political environment. However, a critical aspect of authentic democracy is the enhancement of the ability of individual citizens to engage in critical evaluation of existing knowledge and values and creation of new ones (Feucht, 2010). The achievement of such ability emerges out of the practice of reflective self-critique and analysis of views and values from multiple perspectives based on non-dualistic logic. The maturity of internal

competencies of individual citizens reflects the maturity of democracy. The sharpened ability to exploit multiple functions of mind – reflective, compassionate and multiperspectival functions – will contribute to strengthening dialogical and transformative dimensions of democracy.

7. Buddhist view of market-oriented economy

What needs to be noted emphatically is that Buddhism does not deny economic activity itself. In Buddhist dependent origination doctrine, physiological, psychological, and spiritual dimensions of human being are interdependent for maturity. Accordingly, individuals need proper economic circumstances to follow and achieve spiritual development (Mosler, 2011). Deprivation of basic human needs will prevent any individual from being able to sustain bodily functions 2011) for (Mosler, psychological health philosophical and spiritual practice. A minimum economic well-being must be established for inner peace and the development of multiple functions of mind to become a critical and transformative agent.

However, Buddhism takes a cautionary stance towards market-oriented economy that liberal peace advocates. While western model of market-oriented economy creates profit and could boost macro economy, it opens up the system to a multiplicity of interests and encourages social competition and can exacerbate the clash of different stakes without accommodating those differences for far-sighted mutual benefit and worsen the gap between the rich and the poor. Excessive reliance on market-economy could lead to inequality and social injustice. In his religious journey, the Buddha started his mission of reforming the unjust social order based on loving-kindness, equality and solidarity (Badge, 2014). Anything that ignores or impairs human welfare cannot be accepted as the message of the Buddha (Badge, 2014). An economic activity or system that degrades human dignity and deprives citizens of their opportunity for self-actualization cannot be acknowledged as a legitimate system.

What Buddhism seeks to achieve through economic system is spiritual wealth as well as material one (Mosler, 2011). While showing a critical stance toward western market-economy, it would be a mistake to assume that Buddhism denies market economy categorically. What Buddhism critiques is the lack of spiritual aspect and holistic view for social justice. In principle, in the western discourse, individuals are assumed to be rational, self-interested beings who are prepared to act justly but who are more prone to seek their interests regarding wealth (Mosler, 2011). In Buddhism, human beings are perceived as potentially compassionate individuals with an insight into reality, and human relationships are considered mutually interdependent and restraint is needed regarding excessive self-centered views and behavior as they lead to problems including violence. Buddhism is founded upon the understanding of human relationships of any kind as interdependent and interpenetrating and a compassionate mind-set that inspires us to respond to others with empathy, respect and care, and it is committed to promote and enact dignity of all and spiritual fulfillment, envisioning an economic system that sustains and promotes social justice and equity.

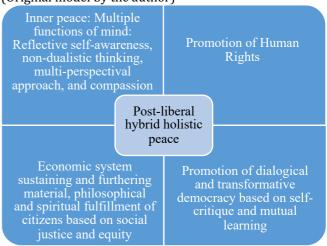
A Buddhist envisioned economic system does not deny individuals working for their own self-interest since spiritual fulfillment needs proper physiological and socio-economic conditions. However, Buddhism also warns that if individuals work exclusively for their own self-interest and benefit at the expense of others, that would end up with moral corruption of society and cause conflict. In the Buddhist view, market-oriented economy, while creating certain benefit and improving macro economy, needs to integrate moral and philosophical foundations that help individuals engage in economic activity with a holistic view of mutual interdependence and interpenetration of all participants and promote both material and spiritual achievement. The economic system that is required in post-liberal peace is the one that undergirds human physiological, psychological, and spiritual maturity.

8. Post-liberal hybrid holistic peace model

As shown in Figure 1, Buddhist inner peace and the pillars of liberal peace thesis – human rights, democracy, and market-oriented economy – can build a complementary relationship to strengthen internal and external aspects of peace. As the figure illustrates, four elements: enhancement of human rights principles, promotion of dialogical and transformative democracy based on self-critique and readiness for mutual learning, an economic system that sustains and furthers philosophical and spiritual fulfillment as well as material one based on social justice, and equity, and development of inner peace founded upon multiple functions of mind represented by reflective self-awareness, non-dualistic thinking, compassion, and multi-perspectival approach – constitute post-liberal hybrid holistic peace.

All four aspects are interconnected and complementary to each other to pave the way for a sustainable society and human relationships. When we develop peace on physiological, socio-political, economic, philosophical and spiritual levels in an integrative way, we can optimaly improve our potential to become a critical and transformative agent for a peaceful world.

Figure 1 Post-liberal hybrid holistic peace model (Original model by the author)



9. Conclusion and research implications

Seeking to show itself as an exemplar of post-liberal hybrid peace model, this research has explored a holistic peace model based on a complementary relationship between liberal peace thesis and Buddhist inner peace. Building a complementary relationship between different visions of peace is not easy. However, it needs to be recognized that every peace view is partial and transcending one's purview of peace and learning from other culturally and philosophically constructed views will be of great benefit in the long-run.

The present global interdependent and interconnected situation shows us a moral obligation to actively pursue politics of inter-civilizational dialogue to engage in a concrete practice of cross-cultural learning to address global challenges including violent conflicts. Based on an awareness of the presence of different cultures and civilizations in global affairs, dialogue is an open-ended process in which we view critically and sympathetically one tradition from the points of view of another and vice versa.

Given that peace research has become a global agenda, which requires those with distinct philosophical and intellectual backgrounds to appreciate and cooperate each other and that peacebuilding enterprise is a complex and multi-faceted phenomenon that demands creativity and flexibility of those engaged in it, it is certainly not the time to make a clear and fixed demarcation between Western and non-Western blocks but, more importantly, it's time for each of us to rid ourselves of narrow self-imposed perspectives or boundaries and initiate a dialogue within the larger context that includes both West and non-West. The intellectual enterprise of knowledge creation and legitimation is never a static substance but an everlasting process that keeps renewing itself and the research explored in this paper should not be an exception.

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Analysis of euthanasia from the cluster of concepts to precise definition

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Abstract

There are common concepts between euthanasia and suicide because euthanasia is historically connected with the discourse on suicide. In widespread literature on euthanasia there is confusion over the concepts and definitions. These definitions are analyzed in this paper and along with other conclusions and distinctions the researcher has substantially defended his definition of euthanasia. There are two different usages of the term euthanasia: a narrow construal of euthanasia and broad construal of euthanasia. Contrary to other researches, the researcher agrees only with the narrow construal of euthanasia, i.e. active euthanasia. The researcher's definition of euthanasia is: intentionally causing a terminally ill person's death through an action performed by a physician. As a result, passive euthanasia is expunged from the definition of euthanasia. In addition to that, the definition excludes suicide, assisted suicide, and physician-assisted suicide.

1. Introduction

Concepts are at the core of philosophical investigation. Describing concepts and definitions is one of the main tasks of philosophical practice and activity. Likewise, attempting to understand the meaning of the output of various disciplines and questioning their underlying principles besides clarity are also key tasks of philosophy. Regarding bioethics, especially euthanasia, philosophy plays a role in all the above-mentioned areas of conceptualizing, defining, clarifying, understanding beside discussing its ethical dimensions and evaluating the scores of arguments that are part of the narrative and discourse on the subject.

The complexity of defining euthanasia emerges from its historical background and current usage. In other

terms, the issue of euthanasia is both old and new. It's traditional and the underpinnings of its discourse are old, connected with suicide on which thinkers and philosophers since the ancient period have held positions. The late twentieth century represents two aspects of the issue of suicide. The debate becomes divided into two separate discourses: suicide and euthanasia. Both these subjects became separate along with their subject matter and arguments, though there is an unavoidable overlap between them. The nature of euthanasia became special because it touches on medical profession and debate over rights and duties. Thus, euthanasia became an interdisciplinary subject of legal analysis in various countries.

The origin of euthanasia, most of its conceptual framework, and some of its main arguments is in suicide. Therefore, a lucidity of the issue, clarity of the concepts, and precision of the main definitions employed in the discourse are sought in the following sections of the paper.

2. Conceptual History of Euthanasia

Euthanasia is old in the sense that it is connected conceptually and historically with the historical debate of suicide. Suicide included concepts such as that Athenian law treated suicide as a crime (Mair, 2007, pp. 26-30), so the concept of crime developed. Hippocrates (460-370 BCE) worked on its approval through calling it antiprofessional for a physician (Hippocrates, 2005); Plato worked against disapproval of suicide through concepts like judicial decree, excruciating misfortune, and moral disgrace (Plato, 1980, p. 268); Aristotle developed the concept of citizenry against suicide (Aristotle, 1999, p. 84); Annaeus Seneca (4 B.C.E.-C.E. 65) presented concepts like individual autonomy and quality of life in favor of suicide (Seneca. (1917/ 1998, pp. 35-39). Against suicide, Aquinas presented three concepts: selfperpetuation responsibilities, individual communitarian responsibility, and divine authority over life (Aquinas, 1947, 11, 11, Q.64, Art.5.). Michel de Montaigne presented the concept of personal choice in favor of suicide (Ferngren, 1989, pp. 159-61).

During the Renaissance, Thomas More (1478-1535) defended suicide for issues like torturous and incurable illness by rationalizing concepts such as starvation and opium (More, 1999, p. 22.). David Hume (1711-1776) worked on the moral permeability of suicide when life is most plagued by suffering through concepts such as individual autonomy and social benefit (Hume, 2004, p.2-8). Other philosophers of the Age of Reason, such as John Locke and Immanuel Kant, opposed suicide. Locke argued that life, like liberty, represents an inalienable right, which cannot be taken from or given away by an individual (Ferngren, 1989, pp. 173-75). For Kant (1724-1804), suicide was a paradigmatic example of an action that violates moral responsibility. Kant believed that the proper end of rational beings requires self-preservation, and that suicide would therefore be inconsistent with the fundamental value of human life (Kant, 1785). This brief historical survey provides a score of concepts that are present in the discourse of euthanasia.

Euthanasia is new in the sense that most of the debate on the issue treats the matter as a consequence of advanced modern medical technology. The continuous development of advanced medical technology has brought various moral issues under new scrutiny and ethical evaluation. For example, by using artificial lifesustaining technology delay of death is possible against the wishes of patients who may be in pain and or other forms of suffering. Moreover, it is also possible to keep people alive who are in a coma or a persistent vegetative state. In cases like these, sustaining life versus taking life or allowing someone to die become moral dilemmas in face of employing various life sustaining medical technologies and use of lethal injunctions and morphine.

3. Suicide and euthanasia: conceptual parallelism

The above concepts are present in the discourse and narrative given by proponents and opponents of euthanasia. These concepts directly or indirectly touch the issue of euthanasia from many perspectives and link the issue with philosophical tradition. Such mixture of concepts shows that the problem of euthanasia has a long history of philosophical discussion. However, most of the discussion revolves around the issue of suicide.

The discussion of suicide in a broader sense could be related to the problem of euthanasia since their aim is termination of life. Suicide is a general concept whereas euthanasia is special. Euthanasia is about terminally ill persons whereas suicide is a comprehensive concept including all forms of self annihilation. However, lines of distinction could be drawn between suicide and euthanasia. "Euthanasia is an alleged solution for the ills of dying, whereas suicide is an alleged cure for the ills of living" (Donnelly, John, 1998, p.10). On the other hand, wishing death and planning steps towards ending one's life is shared by both euthanasia and suicide. Both of these issues share many common threads which bring suicide and euthanasia on parallels, if not completely, nevertheless, partially. Therefore, in the historical sketch the distinction between suicide and euthanasia is irrelevant because suicide is general and in principle it includes euthanasia. And "Indeed, to justify either one, suicide or mercy killing, is to justify the other" (Fletcher 1987 / 1989, p. 91).

4. The need to define euthanasia

It is important to have a clear definition of euthanasia. As a matter of fact, defining euthanasia and the relevant terms deserve a thorough tactful analysis because much of the confusion which besets the contemporary euthanasia debate can be traced to imprecision in definition: "Lack of clarity has hitherto helped to ensure that much of the debate has been frustrating and sterile" (Otlowski, 1997, pp. 16-17).

The discussions on euthanasia have made it a multidisciplinary subject; however, the issue in its essence is connected with medicine. On December 4, 1973, the House of Delegates of the American Medical Association (AMA) asserted its position on the issue of euthanasia as follows:

"The intentional termination of the life of one human being by another--mercy killing--is contrary to that for which the medical profession stands and is contrary to the policy of the American Medical Association. The cessation of the employment of extraordinary means to prolong the life of the body when there is irrefutable evidence that biological death is imminent is the decision of the patient and/or his immediate family. The advice and judgment of the physician should be freely available to the patient and /or his immediate family." (as cited in Rachels, 1975 / 1994a, pp. 112-113)

The AMA's position on the issue came to be named as conventional doctrine on euthanasia (CDE) or traditional view. It is important to mention that AMA's position, although adopted in the United States; its message was adopted by the World Medical Association's Declaration on Euthanasia, adopted by the 38th World Medical Assembly, Madrid, Spain, in October 1987, states:

"Euthanasia, that is the act of deliberately ending the life of a patient, even at the patient's own request or at the request of close relatives, is unethical. This does not prevent the physician from respecting the desire of a patient to allow the natural process of death to follow its course in the terminal phase of sickness." (World Medical Association, 2002, Section, 1)

The declarations by American Medical Association (AMA) and the World Medical Association can be helpful in developing concise and precise concepts and definitions that are important for any meaningful discourse on euthanasia.

5. Defining euthanasia

Euthanasia etymologically comes from two Greek words, eu, well, and thanatos, death; it means good or easy death (Baird & Rosenbaum, 1989, p. 9). Gradually the meaning of the word changed from easy death to the actual medical deed to make death easy. Finally, it gained the meaning of mercy killing. The common synonym for euthanasia in both lay and professional vocabularies has been mercy killing (Koop, 1989a, p. 69). Merriam-Webster's dictionary defines euthanasia as "an easy and painless death, or, an act or method of causing death painlessly so as to end suffering: advocated by some as a way to deal with victims of incurable disease" (2008). Similarly, the Euthanasia Society of America, founded in 1938, defines euthanasia as the "termination of human life by painless means for the purpose of ending severe physical suffering" (Hardon, 2004, Euthanasia, para.14). The American Medical Association's Council on Ethical and Judicial Affairs (1992) defines the term as follows: "Euthanasia is commonly defined as the act of bringing about the death of a hopelessly ill and suffering person in a relatively quick and painless way for reasons of mercy" (p. 2230).

Though euthanasia is mercy killing in the sense of painlessly putting a terminally ill patient to death, the above-mentioned definitions lack clarity and could lead to misunderstanding. There are other definitions which suggest that euthanasia also means refusing unwanted care or withdrawal of ongoing care (Adams, 1992, p. 2021). Therefore, there are two different uses of the term "euthanasia." The first is sometimes called the narrow construal of euthanasia. In this view euthanasia is equivalent to mercy killing. Thus, if a physician injects a patient with a drug with the intent to kill the patient, that would be an act of euthanasia; but if the physician withholds some extraordinary and excessively burdensome treatment from a patient and allows the patient to die in a natural way, that does not count as an example of euthanasia. The second view, is sometimes

called the *broad construal of euthanasia*, it includes both mercy killing and cessation of extraordinary medical treatment: *active euthanasia* and *passive euthanasia*. The broad construal is more widely used; although this paper supports the narrow construal of euthanasia.

Active euthanasia or euthanasia by action, also called mercy killing or positive euthanasia, is intentionally causing a person's death by performing an action such as giving a lethal injection. Passive euthanasia or euthanasia by omission, also called negative euthanasia, is the withholding or withdrawing the unnecessary and extraordinary medical treatment. Rachels (1983) widens the definition of active euthanasia; according to him it refers to the intentional and /or direct killing of an innocent human life either by that person, suicide, or by another, assisted suicide (p.19). Gifford (1993) describes the difference between the two types of euthanasia: "Passive euthanasia involves allowing a patient to die by removing her from artificial life support systems such as respirators and feeding tubes or simply discontinuing medical treatments necessary to sustain life. Active euthanasia, by contrast, involves positive steps to end the life of a patient, typically by lethal injection" (p. 1546).

Active and passive euthanasia are the main categories; however, they are further classified depending on the relevant factors or circumstances such as *Voluntary, Involuntary,* and *Non-voluntary euthanasia*. The American Medical Association's Council on Ethical and Judicial Affairs (1992) makes three distinctions concerning consent and euthanasia as follows:

"Voluntary euthanasia is euthanasia that is provided to a competent person on his or her informed request. Non-voluntary euthanasia is the provision of euthanasia to an incompetent person according to a surrogate's decision. Involuntary euthanasia is euthanasia performed without a competent person's consent." (p. 2230)

These distinctions while combined with the active/ passive distinction form six different types of euthanasia: voluntary active, voluntary passive, non-voluntary active, non-voluntary passive, involuntary active involuntary passive. Closely related to euthanasia are terms such as assisted suicide and physician assisted suicide. Assisted suicide is when someone provides an individual with the information, guidance, and means to take his or her own life with the intention that they will be used for this purpose. Likewise, when it is a doctor who helps another person to kill himself or herself it is called physician assisted suicide. However, there is a sharp difference between euthanasia and physician assisted suicide. The AMA's Council on Ethical and Judicial Affairs (1992) states as follows:

"Euthanasia and assisted suicide differ in the degree of physician participation. Euthanasia entails a physician performing the immediate life ending action (e.g., administering a lethal injection). Assisted suicide occurs when a physician facilitates a patient's death by providing the necessary means and /or information to enable the patient to perform the life-ending act (e.g., the physician provides sleeping pills and information about the lethal dose, while aware that the patient may commit suicide)." (p. 2231)

6. Euthanasia: what it is and what it is Not

The researcher holds that euthanasia is only the narrow construal of euthanasia; that is active euthanasia alone. The researcher's contention is that since euthanasia enfolds the meaning of intentional, mercy killing in what has come to be known as passive euthanasia, intentional killing is not part of the withholding or withdrawing the unnecessary and extraordinary medical treatment. The confusion between suicide, assisted suicide, and physician assisted suicide, and euthanasia also deserve analysis. This confusion of terms is very widespread in the well circulated literature on euthanasia; most importantly, Rachels, as noted earlier, confuses these terms too; his definition of active euthanasia includes mercy killing, suicide, assisted suicide and physician assisted suicide (Rachels, 1983, p.19).

The researcher holds that passive euthanasia, suicide, assisted suicide, and physician assisted suicide are not euthanasia; only active euthanasia "mercy killing" is euthanasia. The researcher's understanding is consistent with AMA's definitions; intentionally causing a terminally ill person's death for the reasons of mercy by a physician. The definition includes: voluntary, non-voluntary, and involuntary active euthanasia. The definition excludes: suicide, assisted suicide, physician-assisted suicide and passive euthanasia.

The definition is based on the facts that: (1) the death is caused by an agent (human) instead of the subject (the patient), (2) the causing of death is intentional (3) the death is caused either by the request of the subject or the state of the subject to make it different from a pure homicide (4) the death is caused by commission or action and (5) the subject is terminally ill and (6) the agent to cause the death is a physician. Therefore, euthanasia as defined above will include only active euthanasia.

The reasons for not considering passive euthanasia as euthanasia include: (1) the death is natural, and not artificial (2) the death is not caused by action of any agent. Suicide, assisted suicide, and physician assisted suicide are excluded because the death is not caused by an agent other than the subject. The very integral factor of the notion of euthanasia is being killed by some agent (person) instead of the subject.

7. Conclusion

The study showed that there are two different usages of the term, euthanasia: narrow construal of euthanasia, which refers to mercy killing or active euthanasia; and broad construal of euthanasia, which refers to both active and passive euthanasia. The researcher agrees only with the narrow construal of euthanasia, i.e. active euthanasia. The researcher's definition of euthanasia is: intentionally causing a terminally ill person's death by performing an action by a physician. As a result, passive euthanasia is expunged from the definition because euthanasia means intentional mercy killing; and in passive euthanasia intentional killing is not part of the withholding or withdrawing the unnecessary and extraordinary medical treatment. Therefore, researcher's definition includes only active euthanasia "mercy killing" as euthanasia. The definition excludes: suicide, assisted suicide, physician-assisted suicide and passive euthanasia. The very integral factor of the notion

of euthanasia is being killed by some agent (person) instead of the subject.

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The surrogacy industry in Georgia and Japanese patients

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Abstract

On 19 February 2015, a law regulating reproductive medicine (surrogacy) passed the legislative process in Thailand and was next enacted with the approval of the cabinet and King Bhumibol Adulyadej in July 2015. Since then, some intermediary surrogacy agencies based in Thailand, including Japanese surrogacy agencies, have developed a multinational surrogacy industry with branches in Georgia. This paper is an attempt to clarify the present state of the Georgian surrogacy industry, and also the risks inherent in the Georgian surrogacy industry. The paper aims to provide information which is relevant to the Japanese patients seeking surrogacy treatment as well as researchers in reproductive medicine. Japanese couples need to carefully examine the various options offered by foreign surrogacy agencies and hospitals, because some of them operate without being well versed in the support they provide over procedures to have surrogate children recorded in Japanese family registries so that they may acquire Japanese nationality. Those who are planning to participate in Georgian surrogacy tourism should keep up with the latest legal developments in Georgia, and ponder deliberately whether they still want to go ahead and take part in the reproductive medicine programs there, if at all.

1. Introduction

Thailand's status as a surrogacy hub in the early 21st century has rivaled India's, greatly galvanizing its economic development. However, the industry has seen dramatic upheaval in the country since 2014. Patients from developed nations seeking surrogacy treatment fled Thailand *en masse* with the enactment of the *Protection for Children Born Through Assisted Reproductive Technologies Act, 2015*, on July 30th, 2015. While these refugees initially found greener pastures in Nepal and the Mexican state of Tabasco, public outcry over the flood of gay couples seeking surrogacy arrangements led the authorities in Nepal and Tabasco to issue complete bans on commercial surrogacy by the end of 2015.

In response to these developments, many organizations turned their attention to Cambodia as an alternative site for surrogacy operations, where the lack of legislation concerning reproductive medicine *de facto* permitted surrogacy treatment. Among them was the New Life Global Network (NLGN), which opened a local branch in the country in March 2015. However, the Cambodian government soon followed suit with its neighbor by announcing a complete ban on commercial surrogacy in all medical facilities in Phnom Penh on November 3rd, 2016. (Readers can find an early account

of these developments in a 2016 paper by the author.¹) As of this writing (March 2018), NLGN is expanding its surrogacy business from its local foothold in Thailand to other locations in Southeast Asia, including Vientiane in Laos and Naypyidaw in Myanmar.

The two primary intentions of the *Protection for Children Born Through Assisted Reproductive Technologies Act, 2015* were to ban commercial surrogacy and regulate altruistic surrogacy. With its passage and enactment, where will so-called 'surrogacy refugees' from developed countries, including Japan, turn in their search of a new host country offering reliable, safe, and secure access to the reproductive medical services they need?

The author's continuing research into surrogacy in Asia (Kodama, 2012, 2014abc, 2016, 2017) suggests their exodus from Thailand will likely shift demand primarily to the USA (California, Nevada, etc.), Georgia (Gruziya)², Ukraine, and Russia.³

One Ukraine-based surrogacy brokerage firm, BABY 4 YOU, has targeted Japanese surrogacy refugees since 2016, offering detailed information about the process along with video infomercials in Japanese on its website⁴. Boasting comprehensive support by both Japanese and Japanese-speaking Ukrainian staff, the agency is partnered with two hospitals in the Ukrainian capital of Kiev: Family Source Clinic⁵ and the Kiev City Maternity Hospital⁶.

The Law of Georgia "On Health Protection" Article 143 provides that the surrogate retains no parential rights in respect of the child.

- 1) Extracorporeal fertilization (IVF) is allowed in the following cases:
- a) For the purpose of treatment of infertility, as well as in case of risk of transmission of genetic disease on a wife's or a husband's part, by using sex cells or an embryo of the couple or a donor, if the couple's written consent has been obtained.
- b) If a woman has no uterus, for the purpose of transfer and growth of the embryo obtained as a result of fertilization to the uterus of another woman ("surrogate mother"). The couple's written consent is obligatory.

¹ Kodama, M.: The Present State of Regulations Concerning Surrogacy in Thailand, Japanese Association for Philosophical and Ethical Researches in Medicine, *Journal of Philosophy and Ethics in Health Care and Medicine*, 10, 64-68, 2016.

https://www.youtube.com/watch?v=kW9vh7SWaP4 http://www.medicare-4u.com/doctors/galina-strelko/, Ukraine, 04053 Kiev, 31/33 Kudryavska str., infertility-kiev hospital(Clinic Family Source) https://dairibo.com/clinic.html 6 Opened in 1918 and headed by Chief Doctor Natalia P. Goncharuk (M.D., Ph.D.).

https://www.youtube.com/watch?v=fRH357mYJMY, Ukraine, 01011 Kiev, 5 Arsenalna str., Maternity Hospital

2) The couple is considered to be parents in case of the childbirth with the responsibility and authority ensuing from it. A donor or a "surrogate mother" has no right to be recognized as a parent of the born child.

Extracorporeal fertilization (IVF) Article 144:

For the purpose of artificial fertilization it is possible to use female and male sex cells or an embryo conserved by the method of freezing. The time of conservation is determined according to the couple's will by established procedure.

Article 143 permits in vitro fertilization, gamete/embryo provision, and surrogacy. The parents of the surrogate child must be those commissioning the surrogacy, and not gamete/embryo donors or surrogate mothers. Article 144, "Extracorporeal Fertilization (IVF)," permits the cryopreservation of gametes and embryos. The text of the Law of Georgia on Health Protection restricts surrogacy to heterosexual married couples in which the wife lacks a uterus, but both commercial surrogacy and altruistic surrogacy are permitted in practice. In January 2014, the Minister of Justice of Georgia stated plans to enact surrogacy-regulating legislation to ban commercial surrogacy and restrict surrogacy to altruistic surrogacy, but deliberation on the bill was suspended in 2016, due to pushback from opposition voices.

Another agency, the Thailand IVF Support Center, provided surrogacy services in Thailand catering to Japanese clients until 2014. With the passage and enactment of the Protection for Children Born Through Assisted Reproductive Technologies Act, 2015, the agency's reproductive director Takehiko Yokosuka relocated his surrogacy business operations to the Georgian capital of Tbilisi, attracted by the opportunity presented by the legalization of commercial surrogacy in Georgia in 1997 with the enactment of the law *On Health* Protection. 7 He established a local brokerage firm, Georgia Surrogacy Japan, in partnership with Dr. Tamar Khachaouridze, chief of the Surrogate Motherhood Center of Georgia and director of the association Hope for the Future⁸, which mediates surrogacy arrangements between the Surrogate Motherhood Center of Georgia and Japanese customers.

This paper explores and reviews the practices and conditions of the surrogacy industry in Georgia, the birthplace of NLGN and the base of operations for the Japanese-run brokerage firm Georgia Surrogacy Japan.

In the following sections on **Risks facing the Georgian surrogacy industry** and **Conclusion**, the author describes factors and trends in Georgia and Japan that could disrupt the industry, which should be carefully considered by potential surrogacy patients and reproductive health researchers in Japan.

2. Risks facing the Georgian surrogacy industry

Georgia is chiefly an agricultural nation: its primary industries are farming, food processing, and mining. Wine has always been a powerful domestic industry that

² The Japanese government decided to change the country's official name from the exonym *Gurujia* (Russian: "Gruziya") to *Joojia* (English: "Georgia") on April 22nd, 2015.

³ Public awareness of Russia as a surrogacy option was heightened with media coverage of the birth of a baby boy to Izumi Maruoka, a freelance television announcer, on January 3rd, 2018 via a Russian surrogate mother.

⁴ https://www.dairibo.com/about_UA.html

⁵ Opened in 2013, and headed by Dr. Strelko Galina (M.D., Ph.D.), a leading specialist in IVF.

⁷ https://www.surrogacy.ge/it/the-best-surrogacy-legislation

⁸ Hope for the Future was established in 2000, and began accepting applications for Georgian surrogate mothers and egg donors at the same time.

brings in foreign capital, a fact that still holds true today. However, ever since commercial surrogacy and other infertility treatments were legalized in 1997, assisted reproductive medicine has become the country's single greatest source of foreign revenue. Propelled by the surge in surrogacy tourism, the Georgian economy enjoyed impressive GDP growth for a time: 9.3% in 2005, 12.4% in 2007, and 6.4% in 2010. Today, however, the real GDP growth rate is stagnant (2.7% in 2016), and the citizen unemployment rate remains high (12.4% in 2014, 11.9% in 2015).9

National income is low-per capita GDP was a mere 3,892 USD in 201610—which has effectively resulted in no shortage of applicants for surrogate motherhood. Divorced single mothers and impoverished married women with children are the lifeblood of the surrogacy industry. Georgian law stipulates that couple commissioning surrogacy be recorded on the surrogate child's birth certificate as the legal parents. This means that typically, the requesting couple and the surrogate mother have no need to meet except for when they sign the surrogacy contract and hand over the child. Surrogacy brokers make it abundantly clear to surrogate mothers that they will simply be the womb mother, not the legal mother, of the child they will bear. Many poor surrogates initially wrestle with internal conflict about their role, viewing it through the lens of traditional morality. Eventually, compelled by economic necessity, most warm to the idea of being, in effect, an 'incubator'.

Risk Factor #1

The Georgian Apostolic Autocephalous Orthodox Church's condemnation of commercial surrogacy stands in stark relief to this social trend, with officials proclaiming that "women should not be used as incubators". Ilia II, the spiritual leader of the Church, castigated commercial surrogacy in January 2014 on moral grounds. His inappropriate remarks, including statements that surrogate children are "pitiful" and "should not be baptized", could inflame prejudice against this blameless group. All the while, the Church has remained conspicuously silent on alternative means to enrich the impoverished citizens seeking to participate in the surrogacy industry. Georgia's bid to become a member state of the EU, which prohibits commercial surrogacy, is another crucial factor that plays into the debate. Proposed legislation by the Ministry of Justice to ban commercial surrogacy was leaked in 2014, arousing fierce debate over its merits.¹¹ With mounting domestic controversy about its pros and cons, tighter restrictions and even surrogacy bans may be on the horizon: no one should take the future of the industry in the country for granted.

Risk Factor #2

9 Basic Data on Georgia, Japan Ministry of Foreign Affairs. (in Japanese)

http://www.mofa.go.jp/mofaj/area/georgia/data.html ¹⁰ *Ibid*.

Georgia has failed to provide legal resources to support the repatriation of surrogate children ever since On Health Protection was enacted in 1997. With no solution in sight, surrogacy brokers have deliberately avoided the issue. Confronted with the problem, the Georgian government amended the law in 2014 to open up Georgian citizenship as a legal possibility to surrogate children unable to acquire citizenship in the home country of the requesting party. However, requesting couples and their children can get stopped short in Georgia if the surrogacy arrangements fail to meet the legal requirements as revised by the Georgian administration in 2012. (These might include omissions or errors in the surrogacy consent form signed by the couple, the certificate of uterine embryo transfer, the birth certificate, or improper authentication of the signed surrogacy contract.) Mistakes made by insufficiently knowledgeable (or simply sloppy) brokers can result in the surrogate child being placed in a child protection center. Moreover, the surrogate mother and egg donor could be called on to testify in court, violating their privacy.

There have even been cases where a shoddy broker incorrectly recorded the surrogate mother as the child's legal mother on the birth certificate issued by the local hospital. Such illegal actions have drawn uproar and stern rebukes from others in the industry. In effect, this allows the surrogate mother to legally refuse to transfer the surrogate child, and raise him or her herself. In the worst-case scenario, the mother could be a conduit for human trafficking to a third party.

3. Conclusion

In its current form, On Health Protection protects the rights of the couples who commission surrogacy arrangements, but not necessarily those of the impoverished Georgians desperate to become surrogate mothers. For example, there are no regulations about the number of times a woman can provide surrogacy services. Robust legal provisions to assiduously protect the health of surrogate mothers would be desirable in this regard.

Georgia is a poor Eastern European country where 18% of the population lives below the international poverty line (1.25 USD per day: 2009-201212). The government's advocacy of surrogacy tourism as national policy pulls in huge numbers of surrogacy refugees from developed countries, which has brought it face to face with a variety of problems even as it drives the national economy. Recent years have seen officials attempt to address these issues with legal reforms, on a trial-anderror basis.

Japanese couples who want to pursue surrogacy in Georgia should be mindful of the myriad legal procedures and bureaucracy that await them. In Georgia, they need an exit permit for their child, as well as the birth certificate issued by a local hospital. In Japan, they need to enter him or her in their family registry, along with the necessary processes to grant citizenship and a passport. There are two ways to record a foreign-born

proposed legislation would have restricted commissioning parties and surrogate mothers to Georgian nationals, and permitted only altruistic surrogacy. The bill met resistance from groups supportive of commercial surrogacy, and has not yet been deliberated as of the time of this writing.

¹² Japan Committee for UNICEF, "The State of the World's Children 2015". (in Japanese) https://www.unicef.or.jp/ library/sowc/2015/pdf/15_04.pdf

surrogate child in the family registry in Japan: as a legitimate birth to a Japanese mother and father, and as an illegitimate birth to a surrogate mother. As noted above, *On Health Protection* requires the couple requesting surrogacy to be listed as the legal parents on the surrogate child's birth certificate. Accordingly, Japanese couples should report the child as a legitimate birth to a Japanese mother and father in their municipality of residence, in order to officially record him or her in the family registry. Couples will encounter no issues at all with the Japanese legal system if the mother of the foreign-born child is Japanese and under 50 years old.

However, when the mother is 50 years or older, the birth must be reviewed by the Civil Affairs Bureau due to a 1961 directive by the head of the Civil Affairs Bureau of the Ministry of Justice. The Supreme Court has interpreted Article 779 of the Japanese Civil Code to define a child's legal mother as his or her birth mother.¹³ Therefore, if a Japanese mother 50 years or older reported the child as a legitimate birth to a Japanese mother and father, the reviewers would never allow the registration because they think that there's no way the mother over 50 years old can be the birth mother, according to the aforementioned Article 779, even though the Georgian birth certificate specifically designates the Japanese mother as the mother of the a Georgia-born child. This technicality could not only prevent a foreign-born child from being recorded in the family registry, but also leave them stateless unless and until the Georgian courts grant them citizenship.

Japanese couples must research their options with caution, as some foreign surrogacy agencies and hospitals operate without a full understanding of the procedures for recording children in Japanese family registries and acquiring Japanese nationality.

Those who utilize Georgian surrogacy tourism would be well advised to keep abreast of the latest legal developments in the country, and carefully weigh the advantages and disadvantages of pursuing reproductive medicine services there.

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Bioethical issues in Arab society

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Abstract

Recent bioethical issues that have emerged in the field of medicine include, but are not limited to, eugenics (artificial insemination), palliative care (end of life care), euthanasia (medical resuscitation), abortion, and the development of enhanced human body parts. These bioethical issues have raised ethical questions related to the use of modern technology and how it may affect the future of society. These questions consider issues such as: what is the identity of future children? Have human beings become a commodity exchanged by those who have the ability to own them? What is the meaning of justice in medical treatment? How can physicians and nurses perform humanitarian work? Discussions of these questions should begin by determining their

¹³ Supreme Court Grand Bench, 27 April 1962, Minshu, Vol. 16, No. 7, p.1247.(in Japanese)

relationships with typical social and cultural values in society, such as life and death, marriage, family, fatherhood, motherhood, relatives, and next-of-kin. This paper presents a review of the important Arabic literature that has been written on these bioethical issues to show the contributions of Arab scholars in this field. Arabic studies in bioethics can be classified into three types: original Arabic writings, translated studies, and congresses held in the Arab region.

1. Introduction

The term 'bioethics' can be defined as "the ethics of medical and biological research". ¹⁴ Bioethics as a field is "concerned with the ethics and philosophical implications of certain biological and medical procedures, technologies, and treatments, as organ transplants, genetic engineering, and care of the terminally ill". ¹⁵ With bioethics as a part of philosophy, the philosophers discussed bioethical issues that have become a global concern in recent years.

Bioethics is a new field of philosophy that was introduced by Henry K. Beecher in his 1966 article entitled *Ethics and Clinical Research*¹⁶, which criticized the unethical approach of studies such as the Tuskegee Syphilis Study, which is well-known for being unethical regarding both its dependent variable and human rights.

The dependent variable used in the Tuskegee experiment was "whether persons with syphilis were, in fact, better off without the treatment". ¹⁷ The subjects (participants) were mostly illiterate African-Americans from Tuskegee, Alabama (USA). The scientists who conducted the experiment knew that penicillin had become the standard treatment for curing syphilis by 1947, so they could have closed the study and administered penicillin to all the subjects; however, they withheld treatment from the participants and continued the experiment.

With regard to human rights, there are six aspects of the study which can be considered highly unethical: no informed consent was obtained; the participants were not informed of all dangers; participants were autopsied after their death to cover their funeral costs; scientists denied some patients treatment in order to observe the individual dangers and fatal progression of the disease, rather than giving them the cure even though it was known and available; and the designers used a misleading advertisement, which promoted 'Last Chance for Special Free Treatment' although no treatments were given to the patients.¹⁸

¹⁴ Oxford Dictionaries | English. (2018). *bioethics | Definition of bioethics in English by Oxford Dictionaries*. [online] Available at: https://en.oxforddictionaries.com/definition/bioethics [Accessed 30 Dec. 2018].

In response to the Tuskegee Syphilis Study, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research was established in 1974 to identify the basic ethical principles for conducting human research and to develop just and ethical guidelines. This can be considered the birth of bioethics. From this point, ethical conduct became a crucial issue in medicine for three reasons: (1) inhumane treatment of research participants had become public knowledge; (2) 1960s was a unique period of social and political change; (3) advances in technology led to new medical dilemmas. The four principles of bioethics are: autonomy, beneficence, nonmaleficence, and justice. Thus, the social, political, and historical events described created the new field of "applied ethics in medicine" 19 — Bioethics.

This leads to an investigation of medical ethics, which is considered the elementary stage of this new ethical field, because philosophical and ethical heritage focuses on the concepts of human lives, duty, responsibility, human dignity, and the special covenants of medical ethics. In addition, medical ethics implements international standards for the protection of patients and the ethical framework for medical careers, which is considered the basic reference for the international declaration of human dignity.

Bioethics as a concept has been used in Arab culture in the following contexts: ethics of life, ethics of biology, ethics of scientific research on organisms, ethics of medicine and biology, ethics of health and life sciences.

This paper presents a review of the important Arabic literature that has been written in Arabic on these bioethical issues to show the contributions of Arab scholars in this field. To illustrate that, I will classify the Arabic bioethics literature into three types: original Arabic writings, translated studies, and congresses held in the Arab region.

2. Bioethics literature in Arab society

The impact of bioethical issues in Arab society is very weak and marginal; publications on the subject are very rare. It has not received much attention in Arab society compared to other societies around the world. This is because Arab society has tended to focus on other international political issues such as globalization, the clash of ideas, the clash of cultures, and the Arab spring. This indicates that these issues are more important to Arab society than bioethical issues, not only because they are considered significant political issues, but because some governments have encouraged Arab scholars to discuss them.

Researchers have classified Arabic studies in bioethics into three types. The first type is the writings of Arab scholars in this field (original Arabic bioethics writings). The second type is texts on this subject which have been translated into Arabic (translated materials). The third is the conferences and symposiums held in the Arab region to discuss this topic (congresses and conferences).

¹⁵ www.dictionary.com. (2018). *the definition of bioethics*. [online] Available at: https://www.dictionary.com/browse/bioethics [Accessed 30 Dec. 2018].

¹⁶ Beecher, H.K., 1966. Ethics and clinical research. In *Biomedical ethics and the law*. Boston, MA: Springer. pp.215-227

¹⁷ Explorable.com. (2008). *Tuskegee Syphilis Study - Research without Empathy*. [online] Available at: https://explorable.com/tuskegee-syphilis-study [Accessed 30 Dec. 2018].

¹⁸ ibid

¹⁹ Kunis, C.L., 2018. Morality and Medicine: An Historical Perspective, lecture delivered at Global Bioethics Initiative, July 26 2018, New York, USA.

Figure 1. Number of bioethics issues papers written in Arabic literature (original Arabic bioethics writings, translated texts, and congresses), using the keyword "bioethics"

Source	Subjects		Number of bioethics papers
UAEU	Oniginal Anabia	Books	9
Library	Original Arabic writings	Journal articles	0
		Newspaper articles	62
	Congresses		6
Sultan Qaboos	Original Arabic writings	Books	0
Universit y Library	g -	Journal articles	17
J		Newspaper articles	155
	Congresses		33

3. Original Arabic bioethics writings

These researches have been written by Arab scholars; however, these publications are very few and limited. They have addressed general topics in the field of bioethics, such as scientific thinking, biology, genetics, science and moral values, and genetic engineering. Examples of these studies include:

Saleh, Fawaz's, *Legal Studies of Medical and Bioethics*.²⁰ This book consists of six chapters. The first chapter provides information about bioethics and its relationship with law, the second chapter discusses the principles on which bioethics is based, the third chapter states the importance of human rights and dignity, the fourth chapter provides evidence and proof regarding bioethics, and chapters five and six focus on the development of medicine, the effect of biomedicine on patients, and the responsibilities of the doctors. The book not only focuses on the aspects of law, but also on the ethical considerations of medicine.

Padela, Furber, Kholwadia, and Moosa's *Dire Necessity and Transformation: Entry-points for Modern Science in Islamic Bioethical Assessment.*²¹ In this book, the authors discuss how modernity, globalization, and technological advancements challenge religious systems to revisit their traditional doctrines and ethical codes in order to provide guidance for contemporary society. The dialogue between tradition and modernity is apparent in biomedicine where scientific advancements present novel ethical challenges to patients, healthcare workers, and society at large.

²⁰ Saleh, F. (2015). *Legal studies in medical and bioethics*. [online] Acatap.org. Available at: http://www.acatap.org/index.php/40-acatap-books/scientific-books/123-31-8-2015-147 [Accessed 30 Dec. 2018].

²¹ Padela, A.I., Furber, S.W., Kholwadia, M.A. and Moosa, E., 2014. Dire Necessity and Transformation: Entry-points for Modern Science in Islamic Bioethical Assessment of Porcine Products in Vaccines. *Bioethics*, *28*(2), pp.59-66.

Chamsi-Pasha and Albar's *Western and Islamic Bioethics: How Close is the Gap?*²² This article presents the history of the four principles of biomedical ethics in Islamic teachings and elaborates on the differences between Islamic and contemporary Western bioethics.

Padela, Arozullah, and Moosa's *Brain Death in Islamic Ethico-Legal Deliberation: Challenges for Applied Islamic Bioethics*. ²³ In this paper, the authors analyze the verdicts of the Organization of Islamic Conferences' Islamic Fiqh Academy (OIC-IFA) and the Islamic Organization of Medical Sciences (IOMS) from the perspective of applied Islamic bioethics and raise several questions that, if answered by future juridical councils, will better meet the needs of clinicians and bioethicists.

Rady, Verheijde, and Ali's *Islam and End-of-life Practices in Organ Donation for Transplantation: New Questions and Serious Sociocultural Consequences.*²⁴ This study concludes that: 1) many practical aspects of end-of-life organ donation conflict with the Islamic faith's core principles of care for the dying and their families; 2) defining the societal role of transplantation medicine is not uniquely a matter of accounting for technical capabilities and expertise; 3) Muslim scholars should critically evaluate new evidence about end-of-life practices in organ donation, their effects on the care of terminally ill patients and their families, and the consequences on the cultures of Muslim communities worldwide.²⁵

Padela's *Islamic Medical Ethics: A Primer*.²⁶ This paper seeks to achieve two things: to introduce the scope of Islamic Medical Ethics literature and to develop an Islamic perspective on bioethical issues such as abortion, gender relations within the patient-doctor relationship, end-of-life care, and euthanasia.

Ateega Beljl's *Euthanasia Between Permissibility and Criminalization*.²⁷ This article provides explanations of the meaning of euthanasia and the history of its development, its different types and justifications, as well as medical, legal, and Islamic perspectives of euthanasia.

Zakaria Fouad's Scientific Thinking. 28 The important chapters in this book are: The problem of inheritance

²² Chamsi-Pasha, H. and Albar, M.A., 2013. Western and Islamic bioethics: How close is the gap? *Avicenna journal of medicine*, *3*(1), p.8.

²³ Padela, A.I., Arozullah, A. and Moosa, E., 2013. Brain Death in Islamic Ethico-Legal Deliberation: Challenges for Applied Islamic Bioethics. *Bioethics*, *27*(3), pp.132-139.

²⁴ Rady, M.Y., Verheijde, J.L. and Ali, M.S., 2009, June. Islam and end-of-life practices in organ donation for transplantation: new questions and serious sociocultural consequences. *HEC forum 21*(2), p.175.

²⁵ Rady, M.Y., Verheijde, J.L. and Ali, M.S., 2009, June. Islam and end-of-life practices in organ donation for transplantation: new questions and serious sociocultural consequences. *HEC forum*, *21*(2), p.175.

²⁶ Padela, A.I., 2007. Islamic medical ethics: a primer. *Bioethics*, *21*(3), pp.169-178.

²⁷ Ateega, B. (2006). *Euthanasia*. [online] Fdsp.univ-biskra.dz. Available at: http://fdsp.univ-biskra.dz/images/revues/mf/r6/m6-13.pdf [Accessed 30 Nov. 2018].

 $^{^{\}rm 28}$ Zakaria, F., 1978. Scientific Thinking. The World of Knowledge, No.3, Kuwait.

and control of human qualities, Science and human values, and Science and ethics in the present age.

Saeed Al Hafar's *Biology and Human Destiny*.²⁹ In this text, the author predicts the possibility of human cloning, and recommends applying genetic scientists' discoveries according to ethical values.

Mohameed Al-Rubaie's *Genetics and Humanity*.³⁰ This research is an introduction to human genetics and genetic engineering technology. The author raises several questions; for example, do only wealthy countries benefit from these scientific advancements? Will the gap between North and South be reduced? Could the results be used for military purposes?

Abdullah Al-Omar's *Science and Moral Values*.³¹ This book explores the neutrality of science and the responsibility of scientists and researchers towards society and life, as well as the sanctity of human life. The author rejects the practice of human cloning on the grounds of loss of identity.

Nahedh Al-Basqmi's *Genetic Engineering and Ethics*.³² The issues presented in this book are related to human experimentation, artificial reproduction, abortion, human organ transplantation, disease and death, and human enhancement.

Ahmed Mahmoud Subhi's *Philosophy of Medicine*.³³ This book presents an investigation of the relationship between philosophy and medicine throughout history, the responsibility of doctors towards patients, and the moral issues regarding this relationship.

Mohammed Abed Al-Jabri's *Ethics and Bioethics*.³⁴ In this text, the researcher asks the question: To what extent is it permissible to use science to control the areas of reproduction and offspring, the field of genetics, change of living organisms, the field of mind, legitimacy, and death?

Hassan Mousa's, *Reproduction Controversy Science*, *Religion and Morals*.³⁵ This book provides a discussion of the subject of cloning from the perspectives of science, religion, philosophy and ethics.

Joseph Malouf's *Ethics and Medicine*.³⁶ This study considers contraception, abortion, artificial insemination, and euthanasia. The author presents the Islamic and Catholic views of these new ethical issues.

4. Translated studies

The translated studies have tended to focus on the nature of life, genetics, and biology, and unlike the original Arabic bioethics texts, have not addressed the details or any specific issue of modern medical ethics. Some examples of these studies are as follows:

Atighethci Dariusch's *Islamic Bioethics; Problems and Perspective,* is translated from Italian to Arabic by Lubna Alraidi.³⁷ This book provides a critical analysis of the different perspectives and debates in Muslim countries in terms of religious and legal points of view. It also discusses new technologies in biology, organ donation, and genetics cloning.

Pierre-André Taguieff's *Bioethics: Towards a Project of Intellectual Cause,* is translated by Abdulhadi Al edresi. This book was written by a French philosopher and director at the French National Center for Scientific Research in the Paris Institute of Political Studies. The subject of the book is bioethics as an ideological issue and its meaning from different perspectives.³⁸

Frances Kreek's *Nature of Life*, is translated by Ahmed Mostajer.³⁹ This book provides a description and analysis of the phenomena of nature, the creativity of life in the past and present, and the expectation of life development in the future. It does not consider new bioethics issues.

Harsenay and Hton's *Genetic Prediction*, is translated by Mastafa Ibrahem. ⁴⁰ This text investigates the problems of science research and its goals and evaluates the developing field of genetic engineering and its effect on ethics, especially regarding gene modification and human enhancement.

Roz Steven's *Biology, Ideology and Human Nature,* is translated by Mustafa Ibrahim Fahmy. ⁴¹ This book encourages supporters of human enhancement to dispose of criminals and people with disabilities. The author uses biological determinism as a model for the research, based on the theory proposed by Darwin and Hobbes

Genetic Code of Man, by a group of authors, is translated by Ahmed Mostajer.⁴² This book addresses the impacts of biology and medicine in the twenty-first century on ethics, law, and society.

Gregory E. Benis' *Who Fears the Cloning of Man*, is translated by Ahmed Mostajer & Fatima Naser.⁴³ In this book, the author examines the problems caused by advanced genetic engineering in humans, particularly

²⁹ Al Hafar, S., 1984. Biology and Human Destiny. *The World of Knowledge*, No.83, Kuwait.

³⁰ Al-Rubaie, M., 1968. Genetics and Humanity. *The World of Knowledge*, No.100, Kuwait.

 $^{^{31}}$ Al-Omar, A., 1990. Science and Moral Values. Kuwait: Dar Nashar.

³² Al-Basqmi, N.,1993. Genetic Engineering and Ethics. *The World of Knowledge*, No.174, Kuwait.

 $^{^{33}}$ Subhi, A.M. et al., 1993. *Philosophy of Medicine*. Beirut: Dar Alnahtha Alarabi.

 $^{^{34}}$ Al-Jabri, M.A., 1997. *Ethics and Bioethics*. Beirut: Centre for Arab Unity Studies.

³⁵ Mousa, H. (1997). *Reproduction Controversy: Science, Religion and Morals*. Damascus: Dar Al-Fker. Avaliable at [http://www.neelwafurat.com/itempage.aspx?id=lbb77113-37590&search=books].

³⁶ Maluof, J. (1997). *Ethics and Medicine*. Beirut: Almaktaba Albuleseya. Available at [https://libserver.bethlehem.edu/webopac/records/1/64952. aspx].

³⁷ Dariusch, A., 2006. Islamic Bioethics: problems and perspectives. Available at: [http://gate.ahram.org.eg/News/2051698.aspx]

³⁸ Pierre-Andre, T., 1986. Bioethics: Towards a Project of Intellectual Cause. Available at http://www.geocities.ws/cuadernosdelnorte/dosseticidrissi.html.

³⁹ Kreek, F., 1988. Nature of life. Translated by Ahmed Mostajer. *The World of Knowledge*, No.125, Kuwait.

⁴⁰ Harsenay and Hton, 1988. Genetic Prediction. Translated by Mastafa Ibrahem. *The World of Knowledge*, No.130, Kuwait.

⁴¹ Steven, R., 1990. Biology, Ideology and Human Nature. Translated by Mustafa Ibrahim Fahmy. *The World of Knowledge*, No.148, Kuwait.

⁴² Group of authors, 1997. Genetic Code of Man. Translated by Ahmed Mostajer. *The World of Knowledge*, No.217, Kuwait.

⁴³ Benis, G.E., 1999. Who's afraid of human cloning. Translated by Ahmed Mostajer & Fatima Naser, Dar Sotor, Cairo.

their impact on families and human dignity. The writer identifies two positions in the field of cloning, the first is the theory of non-sexual reproduction through cloning (supporting this theory). The second position is natural reproduction through sex. He has rejected this cloning because it affects the integration of the family and human dignity.

5. Congresses and conferences

This aspect of Arabic bioethics studies is comprised of conferences held in the Arab region, including Casablanca, Morocco, Algeria, Lebanon, and Dubai. The topics addressed at these conferences relate to medical ethics, biology, human rights, gene modification, and other ethical issues regarding birth control technology. However, the number of these publications is very limited and considered insignificant compared to the importance of bioethics issues and the number of Western publications which have addressed these issues. Nevertheless, some examples of these conferences are as follows:

Tenth Annual Congress on Drug Formulation and Analytical Techniques, held December 10-11 2018 in Dubai, UAE, organized by the University of Chicago. Theme: 'Inventing a formula for Drug Development and Analytical Techniques'. This conference sought to determine how innovators are closing the gap between product development and adoption, to better identify cyber threats and reduce information security risks, and to debate the potential of greater cross-industry and cross-sector collaboration in the race for faster, cheaper, and better cures.⁴⁴

First International Bioethics Conference held at Sultan Qaboos University, Muscat sultanate of Omann,2015. Around sixty researchers attended the opening ceremony of the conference, which aimed to investigate important ethical issues in the field of medicine and biology, and how these can lead to different perspectives depending on society, beliefs, and research. The conference presented six main topics for discussion over three days: bioethics from an Islamic perspective, the contemporary challenges of bioethics, the issues of ending life and its consequences, global bioethics and benefit sharing, Ebola and its bioethical problems, and genetics and biotechnologies.⁴⁵

Bioethics Issues for Women: Ethics of reproductive health- social and political conditions in Arab countries, held at the University of Beirut, Lebanon, in 2014. This conference focused on public health workers, primarily physicians, nurses, and healthcare teams. It explored the difficult ethical, social, and legal issues of genetic technology and assisted reproductive technologies, as well as future threats to Arab regions regarding issues

44 Alumni Association: Alumni, Parents, Families & Friends. (2018). 10th Annual Congress on Drug Formulation & Analytical Techniques. [online] Available at: https://alumniandfriends.uchicago.edu/events/2018/10th-annual-congress-drug-formulation-analytical-techniques-1 [Accessed 20 Nov. 2018].

related to medicine, ethics, political implications, and points of view that could affect every process of research in reproductive healthcare.⁴⁶

Symposium on Human Right and Genetics, held in Rabat, Morocco, in 1997. The topics of this symposium were the ethical dilemmas posed by the progress of genetic engineering, the definition of the ethics of knowledge, and the threat to the future of the human being and his dignity. The symposium emphasized the importance of scientific knowledge as a value of civilization, of not evaluating scientific progress with emotional attitudes, and of respecting human dignity and the mysteries of creation.

6. Bioethical dilemmas in Arab society

1. Telling the truth to the patient

Some Arab people sell their property (home, furniture, valuable goods) or take loans to pay for medical treatment. However, if a patient has a chronic or incurable disease, should they be told that their case is incurable and hopeless, and therefore there is no need to sell anything or obtain loans for treatment? Even if the patient is told about their situation, then social customs imposed by family members create a pressure to treat the patient regardless of consequences or the results. Should treatment follow tradition or science?

2. Family members' priority

As humans, all family members have an equal right to receive medical care; there should be no discrimination among family members. However, in some countries, a father has less priority than a mother, or a baby is not given the same importance as a father or mother. In this case, what would religion or culture dictate? Who has the priority in a family to receive medical care?

3. Right to live

In the majority of Arab countries, some poor people sell their body parts to cover living costs. In these cases, the hospitals list them as "donors". However, this is fraudulent because they are not donors. The beneficiaries of this business are rich patients who obtain the body parts. Ethically speaking, do rich people have the right to receive donations from the bodies of poor people because of their money?

4. Medical services

In most, if not all, Arab countries, the medical services provided are lower quality compared with services offered in developed countries. Therefore, many patients seek expensive medical care outside their countries. People who receive this type of medical care can be classified into two types:

Rich people who can afford the travel and treatment costs and travel to a country of their choice in order to receive sufficient medical care. Some Arab governments also offer financial support for selected patients to receive medical care in other countries.

People who cannot afford medical care expenses or do not receive support from their government will die from their illness or their family will sell whatever they

⁴⁵ Squsys.squ.edu.om. (2015). SQU Conference. [online Available at https://squsys.squ.edu.om/ConfSys/Default.aspx?msg=msgrc &lang=en [Accessed 17 Oct. 2018].

⁴⁶ Website.aub.edu.lb. (2014). *Bioethics Issues for Women*. [online] Available at: http://website.aub.edu.lb/fm/shbpp/Documents/BiNWIAR-conference-flyer-FINAL-20-1-2014.pdf [Accessed 22 Oct. 2018].

can to raise money for travel and medical care. Is this ethically acceptable?

5. Human body trafficking

In other cases, some people are promised job opportunities outside of their countries but they become victims of human body trafficking. These individuals usually die. Ethically, who is responsible for these cases?

7. Conclusion

It is not possible to find religious answers to most bioethical issues in medical science; therefore, some interpretation is required. However, should this interpretation be led by religious clerks or philosophers?

In the context of Arab culture, it is important to note that interpretations proposed in Islamic philosophy led to the execution of several philosophers who were accused of being heretic. Indeed, neither religious clerks nor philosophers have provided a significant focus to logical explanations for these issues. Likewise, a search of Islamic philosophy regarding Islamic, Arabic, and cultural heritage does not provide solutions for most of these modern issues.

Thus, although future values will not be the same as current values, it is vital to formulate the meanings of freedom, duty, responsibility, human dignity, and the development of dialogue between science, philosophy, and ethics.

Hope for the best and prepare for the worst: Ethical concerns related to the introduction of healthcare artificial intelligence

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Abstract

Background: The introduction of healthcare AI to society as well as the clinical setting will improve individual health statuses and increase the possible medical choices. AI can be, however, regarded as a double-edged sword that might cause medically and socially undesirable situations. In this paper, we attempt

to predict several negative situations that may be faced by healthcare professionals, patients and citizens in the healthcare setting, and our society as a whole.

Discussion: We would argue that physicians abuse healthcare AI through their excessive and dependent use of it, and they will focus only on the AI services in their office and patient medical data and information, and forget to observe the patient in their clinical encounters. In the era of AI introduction, data from the wearable terminal or AI advice will become the primary target of the physician's interest, and could be regarded as a patient surrogate. Paternalism would be paradoxically resurrected by the introduction of state-of-the-art AI. A physician's conflict of interest related to AI as a commercial product could strongly influence his or her actions in clinical settings. We also worry that the general public will become uneasy and hypersensitive slaves to information, compulsively and uninterruptedly requesting healthcare information concerning their own health and advice from AI. An AI system capable of expressing proper and timely empathy to suffering patients could deprive healthcare professionals of their roles in terms of hospitality and emotional exchange. Finally, entire societies would soon share and consolidate healthcare sensitive information from all in the general public as part of a totalitarian healthcontrolled society where individual privacy and personal secrets could be neglected. The advent of the healthcontrolled society could lead to the metamorphosis of the concept of privacy itself into something completely different.

Conclusion: Although AI which surpasses human healthcare professionals may never appear, hoping for the best and preparing for the worst is the best approach to take. To this end, we present some potential countermeasures including conducting clinical research and social investigations concerning problems surrounding the introduction of AI and developing guidelines for its appropriate use.

1. Background: the current situation concerning healthcare artificial intelligence (AI) and our aims

Artificial intelligence (AI) is a general term that implies the use of a computer to model intelligent behavior with minimal human intervention or the automation of intelligent behavior (1, 2). AI is either an entity or system with artificially created intelligence that aims to make advanced and precise inferences for a large amount of knowledge data that processes information at an overwhelmingly high speed (3). Employment of healthcare AI (hereafter, AI) is anticipated to support healthcare professionals in clinical settings and in other various activities. Examples include an automatic medical interview system, automatic creation of discharge summary, presentation of diagnostic hypotheses and treatment recommendations, imaging interpretations for computed tomography magnetic resonance imaging (MRI), pathology, and fundus findings (4, 5, 6). In the United States, AI has already been used in medical student education to teach diagnostic skills (6).

It can be argued that medical facilities with no specialists such as in cardiovascular disease, neurology, or radiology benefit greatly from AI-based medical support. Misdiagnoses of myocardial infarction, cerebral

infarction, and intracranial hemorrhage could be reduced and overlooking of minute cancer findings may be avoided. Telemedicine using the Internet is also a possibility. Even within the field of general medicine, AI could reduce the uncertainty of physician diagnoses, widen the range of differential diagnoses, and would likely increase the options for medical treatment. Any or all of these outcomes would be highly desirable.

Suskind and Suskind claim that patients will not generally be seen by physicians, but instead by nurses equipped with AI of diagnostic and treatment functions. These AI systems might be used when a patient is seen by a 'physician's assistant,' a new class of health practitioner (5). Wearable terminals with AI and implantable sensors have enabled laypersons to monitor their own health status. AI is expected to analyze relevant data with accuracy comparable to that of medical doctors (5, 6). AI could also personalize medical treatment and simultaneously anticipate future diseases of patients by analyzing their DNA. It may even be possible to obtain a second opinion and medical consultation from experts or AI. The use of a medical care robot may also be anticipated (5, 6). Elderly people living alone could be soothed by conversation with the robot, which may prevent decline in cognitive function (7). Suicide counseling using a social networking service (SNS) has also begun (8).

The wearable terminals that remind patients to take their medicine, to weigh themselves, or warn against engaging in unhealthy behavior or eating could also be realized, with further improvements in health condition as yet another possibility. Face-to-face communication may not be required anymore with the introduction of healthcare AI (5). Those in the general public could choose between going to a flesh-and-blood doctor or an AI doctor. In the future, clinics with only AI and no human medical professionals may emerge. In particular, it is not too much to assume that fully automated medical diagnoses by AI would become a reality in radiology or pathology (6). If healthcare AI use is inexpensive, medical expenses paid by ordinary citizens will be reduced, and those who would otherwise refrain from using medical services due to financial reasons would be able to receive the necessary medical care (5).

The introduction of healthcare AI to society as a whole, as well as in the clinical setting, will thereby improve individual health statuses and increase the possible medical choices; these would certainly benefit healthcare providers as well as patients and the general public. Expanding the use of AI in medical facilities and in daily life will continue to accelerate in the future. We would argue that without assuming an extremely antiscience and anti-technology position, no one could claim strong opposition against the use of AI in the world, with the exception of those fearful of losing his or her job due to AI replacing human workers. We do not oppose the introduction of AI because of aforementioned benefits to the clinical setting and society as a whole. However, every bioethical issue has at least two sides (9). AI can be regarded as a double-edged sword that might cause medically and socially undesirable situations, even though it certainly has the potential to make our society better and healthier than ever, just as current smart technologies such as direct-to-consumer (DTC) selfmonitoring devises and smartphone apps may create a double-edged sword for therapeutic relationships and patient safety (10).

In the present paper, we attempt to predict several negative situations that may be faced by healthcare professionals (mainly physicians), patients and citizens, human relationships in the healthcare setting, and our society as a whole. We present potentially problematic situations that arise as a consequence of using AI's ability to process an overwhelmingly large amount of health-related data and information at a very high speed, not only in the medical field but also in the everyday living situations of individuals. Our discussion of issues surrounding healthcare professionals will focus primarily on physicians. However, future changes in the role of the physician and the patient-physician relationship would obviously affect other health practitioners. We conclude by proposing several ways to deal with the unfavorable situations that we predict in this paper.

We begin by clarifying that our arguments are speculative, as our predictions could be simply delusional and nothing problematic actually occurs. We would welcome that scenario, in fact, but we do believe that we should predict the worst possible scenarios in order to prepare the necessary countermeasures. We do not discuss issues related to the situations that AI could completely overtake whole human capacity or any other problems concerning AI with personality or self-consciousness.

2. Undesirable impacts of healthcare AI on physician clinical practice and attitudes

Abuse of healthcare AI by physicians and resulting loss of professional skills: We would argue that physicians may abuse healthcare AI through their excessive and dependent use of it. As a result, they may neglect to master, maintain, and continue the necessary honing of their professional skills. Some authors suggest that clinicians may turn to machine learning for diagnosis and advice about treatments, and not simply as a support tool (11). Others have pointed out that physicians are liberated from the burden of upkeep and the stress of making the appropriate medical decisions (12). We suspect that some physicians may try to use AI to diagnose and treat patients who do not actually require any AI support; these may include patients with simple upper respiratory inflammation, urinary tract infections, or asthma, who can be diagnosed easily by medical interviews or physical examination. We would argue that AI might be used routinely in addition to other existing methods of work-up, without much consideration. As such, they may not appreciate the possibility for AI misdiagnosis, biased advice, or inappropriate recommendations. Information entered improperly to the AI system is not reflected in the diagnosis, and erroneously entered numerical values can cause serious errors.

Reasons for physician abuse of healthcare AI include patient demand for its use, a physician's lack of confidence, anxiety about either a misdiagnosis or inappropriate treatment, and insufficient clinical experience. If a physician becomes blindly dependent on AI for any reason, their clinical and interpersonal skills as a physician are damaged, and this lazy physician runs the risk of harming his or her patients. Some veteran pathologists have already pointed out that pathologists run the risk of becoming lazy with the introduction of AI, saying "if you think that someone will check your work later, you become lazy in your efforts" (13). Automation damages human skills. A pilot's steering skills are thought potentially to decline due to the use of autopilot (6). In a similar manner, physicians wishing to obtain the best bang for their buck, so to speak, may become more willing to abandon clinical skills that are currently perceived as essential by the medical professional society, and instead spend a higher proportion of their time acquiring AI operational skills.

Decreased communication time with patients (paradoxical claim): One common claim is that the introduction of AI will make the diagnosis and treatment decisions more efficient, allowing the physician to shorten the time spent examining each patient, and thus could see more patients without compromising quality of care. Some have also noted that physicians might also spend longer with each individual patient (14). In cases for which diagnostic imaging can be completed quickly by AI, physicians can concentrate on other aspects of the patient's medical care (15). One author commented that the ability of AI to automate and help with clerical work that currently demands so much of a clinician's time would also be welcome. Although not currently accurate enough, automated charting using speech recognition during a patient visit would be valuable and could free up clinicians' hands, allowing them to face the patient rather than spending almost twice as much time on the "i-Patient"—the patient file in the electronic medical records (16). AI provides physicians with the opportunity to comprehend more fully the patient as a whole. Emotional and holistic exchanges with patients may be enhanced by creating a different mental composure for doctors.

That said, we are highly concerned that physicians will focus only on the AI services in their office and patient medical data and information, and forget to observe the patient sitting immediately in front of them in their everyday clinical encounters. Even now, we believe that some physicians only look at electronic medical records, and not the patients. This is why we are concerned that the future will present with physicians who only look at the digital AI display, the data from patient records and his/her wearable terminal (or previously transmitted data), without listening to the patient's voice, see their facial expressions, observe their gait, or examining the patient's body. They might even forget to check the patient's pulse.

Face time with the patient would be shortened and interviews would be neglected. In the era of AI introduction, data from the wearable terminal or AI advice will become the primary target of the physician's interest, and could be regarded as a patient surrogate. Use of AI would help to shorten examination time per patient, and some physicians may try to increase the number of patients they can see over a given time period, and the infamous "three-minute clinical session" in Japan would remain unchanged. Of course, there is also the possibility that physicians require extra time to operate

AI, which would take up time that should be spent focusing on patients. Some patients may become dissatisfied with their "three-minute clinical session," "no face-to-face communication," or their "medical examination lacking any physical contact." Still others might be satisfied with or find no issues with this type of medical care in which their physicians use the latest AI to direct their treatment.

Resurgence of paternalism: Another concern of ours is that the introduction of AI will revive paternalistic attitudes among physicians, as AI may give physicians more "objectively correct" diagnoses, recommendations, and judgments concerning patient care. Paternalism, once perceived as obsolete, would be paradoxically resurrected by the introduction of state-of-the-art AI. Diagnostic predictions or recommendations based on AI are usually presented as digital percentages. For instance, a patient with a cough and fever would receive a list of AI-based diagnostic possibilities as follows: upper respiratory tract inflammation (30%), bacterial pneumonia (20%), bronchial asthma (10%), pulmonary tuberculosis (1%).

It is highly possible that a physician whose primary suspicion is that his patient has pneumonia would be affirmed of his convictions. In this instance, what would happen if the patient feels relatively healthy and pressed for time, and prefers to opt out of the physician recommendations that were backed up by AI? If the AI judgments concerning the patient medical care plan are consistent with those of the physician, the latter is likely to believe that their diagnosis and recommended plans are objective, robust, and infallible, rather than subjective, biased, or arbitrary. As an extension, the physician would more likely regard his or her own judgments and decisions as more accurate, credible, and valuable, worthy of blanket acceptance by any patient.

In the above situation, the final recommendation backed by AI healthcare is perceived as 'undoubtedly beneficial' to the patient, and thus for a patient to refuse this plan would be more readily perceived as naturally stupid or foolish, and unworthy of the physician's respect. In this manner, AI healthcare could resurrect paternalism among physicians, who may in turn be more determined to manipulate, coerce, or excessively persuade patients to accept the 'best plan,' regardless of their intentions or hopes.

The most probable role of AI in healthcare will be to make suggestions to optimize treatment effectiveness and survival time. However, a patient's wishes regarding their healthcare can differ with individual values and change according to the particular circumstances. In cases for which individual preferences and personal life philosophies must be taken into account, AI would not work well (14).

The same is true for situations in which a physician might rule out pneumonia, AI presents a low probability of pneumonia, and yet the patient demand for work-up and antibiotics is strong. In this case, the patient might be categorized as "demanding" or "difficult."

Conflict of interest (COI): A physician's conflict of interest related to AI as a commercial product could strongly influence his or her actions in clinical settings.

Some have claimed that clinical decision-support systems could be programmed in order to generate higher profits for their designers or purchasers by, for example, recommending drugs, tests, or devices of which they are stakeholders, or by altering referral patterns without patient awareness. There is certainly some tension between the goals of improving health and generating profit (11), and healthcare AI could be programmed to suggest a diagnosis or recommendation that would financially benefit the medical institution such as a more serious diagnosis requiring more tests, more prescriptions, and increased anxiety among the patients. In addition, advertisements that oversell the effectiveness of AI may also appear.

If financial resources are invested in the introduction of AI to a particular hospital, physicians could act to collect a return on this investment. We are concerned that the similar adverse conducts and harms which had happened in the field of non-restricted, non-controlled, and free interventions involving stem cell "treatment" could occur again. These included false advertising, inadequate or distorted explanations of the effectiveness and harm, serious adverse events including death due to interventions and poor management, and misdiagnosis (17).

3. Undesirable impacts on patients and the general public: The advent of *slaves to information*

As far as the general public and patients are concerned, we worry that the general public will become uneasy and hypersensitive *slaves to information*, compulsively and uninterruptedly requesting healthcare information concerning their own health and advice from AI. Adverse effects due to layperson self-diagnoses would also occur. Imagine the scenario in which AI provides a differential diagnosis for a middle-aged man with chest discomfort. This list may look something like this: Musculoskeletal pain (40%), gastroesophageal reflux disease (20%), myocardial infarction (5%), angina pectoris (3%), thoracic aortic aneurysm dissection (1%) and pulmonary thromboembolism (1%).

The patient's regular doctor may have already diagnosed the patient with musculoskeletal pain based on medical interview and physical examination. However, the patient reading the list provided by the AI healthcare is now aware of the possibility of "myocardial infarction," "thoracic aortic dissection," and "pulmonary thromboembolism." What would his reaction be to this situation? Arguably, the patient who had been relieved and satisfied with his doctor's diagnoses in the past may suddenly be fearful that he has some other serious diseases. Naturally, the patient response depends largely on the patient's character and their particular case. That said, a longer list for the differential diagnosis may increase anxiety in the patient, who may increase their demand for further work-up. In these instances, the typical physician may be unable to assuage the patient's fear by simply telling them that their muscle pain is normal after yesterday's golfing or weeding.

When an ordinary citizen receives health information, predictions, or advice presented by AI-based wearable terminals in the context of their daily life that is detached from a hospital, health-related anxiety can be higher than that generated in a clinical setting. It has already

been claimed that the integrity and clinical utility of information from some DTC smart devices are currently questionable (10). We predict that some patients would rush to nearby hospitals with intense anxiety if they were notified by their AI terminal of an increased heart rate, supraventricular premature contraction, or that their ECG is showing a complete right bundle branch block. Other reports from the wearable AI terminals that could send one running in panic to the nearest clinic might include being told that one's arteries are aged as an 80-year-old, that your fatigue could be due to diabetes mellitus, or that you have a 5% chance of having cancer.

Laypersons receiving health-related information from AI literally every day are highly more likely to make self-diagnoses. As a result, some would rush unnecessarily to the hospital, while others would begin self-treatment that might sometimes cause serious health issues. The blind belief that AI is infallible, combined with poor understanding and misinterpretation of AI suggestions, could make individuals hypersensitive to health-related information and data about themselves, leading them to act out of confusion. Anxiety would compel them to seek more and more information, some of which could be misleading. If parents use a wearable AI to monitor their child, their anxiety concerning their child's health would be so much greater than their concern for their own health.

It is pointed out that handling healthcare information in appropriate ways is difficult for the general public (18). This is because we tend to believe only what we want to believe and because it is easy to be deceived by medical hoaxes. Some might think that the Internet is a dictionary of information, when sometimes this is actually graffiti or advertisements (18). If a TV program tells the audience that a sleeping pill is effective in treating diabetes, outpatient clinics are flooded with patients demanding the sleeping pill the very next day; if a show reports that natto (fermented soybean product) is good for weight control, then this, too, is sold out quickly the next day (18). Given these responses and the likelihood for individuals to regard AI advice as more scientific, precise, and trustworthy than TV program recommendations; they are even more liable to buy in fully to the suggestions of AI. This so-called 'hypersensitivity to health information' tendency can become problematic in some individuals who become obsessive over their health; obviously, individual reactions to AI information vary widely.

Shinya Tanaka, a Japanese writer, argues that the vast majority of human beings are currently fully reliant on the Internet to the point of dependence; they ask the Internet not only about how they can achieve their goals in life, but also how to choose their own individual purposes and actions. Tanaka claims that modern-day people have become slaves to information, dominated and adversely influenced by something strange called information, and cannot stop taking it (19). A direct-to-consumer self-monitoring AI device would worsen this situation even further due to a lack of corrective input from healthcare professionals. As a result, many slaves to healthcare information would be created.

Funaki, Japanese philosopher, points out that we are now beginning to believe that it is safer for us to delegate the various important judgments to AI than to humans. This is because, by referencing a huge amount of data and constantly correcting judgments, AI seems to produce correct answers and is less prone to misunderstanding. Consequently, AI judgments seem to be highly more reliable than those from humans (20).

4. Demolition of the traditional physician practice and the emergence of *empathy machines*

We are concerned that physicians will be forced into unemployment because other healthcare professionals such as nurses will take over the physician's job by using healthcare AI. Suskind and Suskind describe how the roles of healthcare professionals (physicians in particular) can be transformed with the introduction of AI in clinical settings and in society. Although specialized medical knowledge forms the core of healthcare professional practices, AI would offer laypersons direct access to this knowledge (5). In addition, current tendency to introduce checklists, standard operational procedures, various systems into professional works make traditional individual professional practices routines. As a result, physicians may be destined to lose their role as gatekeepers of this specialized knowledge, as conventional work of a physician could be performed by nurses and quasi-professionals, who can care for patients with chronic conditions such as obesity and diabetes (5).

We agree with these above predictions made by Suskind and Suskind. Physicians may lose their current jobs and present social status. In an era of extended AI use, they would no longer be considered experts, specialists, or consultants; instead, they would fulfill the role of counselor or coordinator working alongside AI. Some physicians would lose their jobs entirely if the cost of AI use becomes cheaper than that required to pay a physician's salary. Occupations involving creativity, management, and hospitality are thought to be more likely to survive even with the extensive use of AI in society; the same could be said for nurses, nursing care staff, childcare staff, and various instructors involved in hospitality-related jobs requiring emotional sensitivity and communication (21). In terms of hospitality, these specialists are far more skilled than physicians, and thus, even if a physician tried to provide their patients with holistic medical care, they could be replaced by nurses and others skilled in emotional communication and sensitivity, who also happen to be armed with smart AI skills.

An AI system capable of expressing proper and timely empathy to suffering patients (Empathy Machine) could also deprive the physicians of their roles in terms of hospitality and emotional exchange. As noted by Suskind and Suskind, no one can maintain that all professionals are great listeners and truly empathetic. They also state that we should not assume that machines and systems will never be capable of single-handedly (without humans) exhibiting empathy for human patients. In the field of 'affective computing,' scientists and engineers are developing systems that can simulate empathetic bedside manner (5). Machines will be equipped to respond to their user in a manner that would appear to be more empathetic than a human being. People may even come to prefer confiding in machines over human beings, especially in situations involving sensitive or embarrassing issues (5).

Consider the absolute necessity of a human for empathetic communication with patients. One study found that when people thought they were talking to a computer, they were less fearful of self-disclosure and displayed more intense expressions of sadness, compared to those who thought the conversational agent was controlled by a human, which illustrated that a conversational agent's lack of humanness can be a strength (22). On the other hand, intuition and empathy are thought to be very difficult for AI to offer, and many individuals may be concerned about AI performing specific tasks that require human feelings such as empathy and compassion. Human beings require personal contact in clinical settings (23).

Even for those who require empathy, we would argue that it is not essential that the entity offering empathetic responses to the person in desperate need of emotional understanding is a flesh-and-blood human being. If empathy can be demonstrated properly and the patient's mindset improves as a result, the empathic existence could be a machine. Even in today's society, there are some individuals who are less comfortable with face-to-face interactions with other human beings, and who would prefer interacting with machines equipped with communication devices. Do individuals who require empathy from others necessarily require the true feelings of living human beings? We are not certain of the answer to this question.

We have all encountered the arrogant doctor, the nurse in a bad mood, a cold laboratory technician, and a clock-watching pharmacist, all of whom could easily hurt someone feeling vulnerable. We would also argue that suffering individuals may often fare better if they had an empathy machine programmed to express human-like empathy, rather than hopefully expecting it from human beings. The empathy machine lacks emotion, selfconsciousness, and therefore, any resulting self-interests that could otherwise cause professionally inappropriate attitudes among human beings. On the other hand, fleshand-blood professionals could be occupied with their own issues or emotionally unstable, or even too tired for compassion, and exhibit indifference to human weakness and suffering. In a sense, flesh-and-blood human beings are unstable and predicting their emotional responses is difficult and troublesome. Humanity is capable of compassion and kindness, but fully human traits include weakness and prejudice. We would also estimate that only a minority of healthcare professionals can exhibit authentic empathy toward their patients, and that most simply do what they are taught and expected to do as professionals. Therefore, an existence for provision of empathy needs not be a human being, not to mention, physicians.

Some people misunderstand AI, believing that AI exhibits empathetic reactions, and that they have true emotion and personality, due to our tendency to anthropomorphize inanimate things and seek out human nature even in non-human objects (24, 25). One author claims that modern-day Japanese people love and have relatively favorable impressions of robots, compared to their counterparts in Western Europe. In Europe and the US, however, the robot is regarded as a threat that could dominate over human beings (7). Perhaps this tendency

found among many Japanese people was caused by animism (perceiving personality and divinity in virtually every existence) in Shinto, an indigenous Japanese religion. Consequently, there is the possibility that Japanese people tend also to anthropomorphize AI without knowing it.

One study has pointed out that a close relationship between care robots and humans has the potential to isolate people socially, and adversely affect conventional human relationships (11). It is true that AI can be regarded as a "fake" human (Simulacra), and thus any suggestions or advertisements that try to get people to believe that AI has emotions, personality, or selfconsciousness are unacceptable. However, as far as the users understand and appreciate the inherent entity that is AI, situations in which they feel emotionally comfortable in communicating with AI are entirely acceptable, even if these are one-way. An appropriate analogy might be the joy that some obtain from playing with or being near to their beloved toys or dolls. Of course, caution should be taken so as to avoid the aforementioned mistake in the cases of children or individuals with cognitive impairment or mental instability using AI exhibiting emotional responses.

5. Arrival of a health-controlled society sharing extensive personal information and the resulting metamorphosis of privacy

We predict that entire societies will soon share and consolidate sensitive and relevant healthcare information from all in the general public, through AI and information networks, as part of a totalitarian health-controlled society where individual privacy and personal secrets could be neglected. The advent of the health-controlled society could lead to the metamorphosis of the concept of privacy itself into something completely different.

Some have proposed to utilize accumulated information on personal mobile terminals for public health. For example, when a patient with influenza is noted, health authorities would use data from the patient's mobile terminal to determine other individuals around the patient. This could help to contain the influenza and other more highly pathogenic viruses and pathogens. It would also allow the identified people to be informed of the necessity for quarantine or isolation (26). Another proposal is to establish a system in which a local authority uses data from smartphones or wearable terminals to preserve individual records of daily steps, blood pressure, weight, body fat, meal contents, family history, personal health records, and drug use information, by sending all data to a central AI. The system would in turn send back recommendations from AI pertaining to each individual's examination (27).

The Japanese novelist Keikaku Ito wrote a novel entitled *Harmony* in 2010, describing a world in which health is considered the most important issue in human life. Characters in the story insert a device called *WatchMe* into their bodies at a certain age; the *WatchMe* precisely analyzes biological molecules inside, monitors them in real time, and sends the results of the analysis to the authorities that monitor the homeostasis for all citizens. All people are socially required to regulate their health strictly, and they must continue to prove their

health (28). Dave Egars, an American writer, published a bestseller in 2013 entitled *The Circle*, which described a giant company dealing with hyper-advanced information communication technology and SNS. Some of the main characters in this book say, "Secrets are lies," "Sharing is caring," "Privacy is theft," and "All that happens must be known (29)."

We would imagine that by employing AI, SNS, wearable terminals, and information collection systems, our future societies would approve of society-wide information sharing and health control of all individuals, and that public health will be prioritized over individual privacy. It is clear that medical monitoring aimed at health promotion will become much easier than it is today due to technological advancements. In the near future, use of monitoring equipment will also become a reality through the use of implantable sensors. Such societies may be dominated by a health supremacy doctrine, or what could be entitled 'healthism.'

No one would object to the benefits of living long and healthy lives. However, if society not only monitors the health-related information of literally all individuals in the community, but then aggregates and analyzes it constantly as well in order to promote health within the society, the individual's right to not submit one's own data, their right to choose which data are available to authorities or not, and the freedom to engage in unhealthy activities may easily be disregarded. Granting any society the right to access sensitive personal information would defeat the individual's personal right to privacy and liberty. In the world portrayed in The Circle, individuals are obligated to let others know that one's privacy (29). Such a world comprises societies for whom their health is controlled by the state; it can also be a society of mutual surveillance by all citizens.

We worry that a time will come when attachment of the wearable terminal and inserting it into the body will become obligatory. The disappearance of one's secrecy for self and freedom to engage in anti-healthy behavior is only growing as a possibility. Of course, societies comprising healthier people would be preferable, but we are concerned about the potential sacrificing of many other important values in life in the process. Here again, paternalism in society would paradoxically be resurrected by the introduction of a state-of-the-art AI.

6. Conclusion

Hope for the best and prepare for the worst; Some potential countermeasures against possible undesirable situations

In this paper, we have predicted and described several worrisome situations concerning the introduction of healthcare AI in clinical settings. The future is unpredictable, but AI can be regarded and treated as the *archangel* described by R.M. Hare: a being with superhuman powers of thought, superhuman knowledge, and no human weaknesses including partiality to self (30). Although the AI in question lacks any personality or consciousness while the archangel has both, people are likely to ignore the difference as trivial.

The archangel will be able to immediately scan for all properties of novel situations, including the consequence of alternative actions. On the other hand, some flesh and blood doctors could be perceived by R.M. Hare as *prole*,

or those with human weaknesses to an extreme degree. Not only does he, like most of us, have to rely on intuition and sound prima facie principles and good dispositions most of the time, but he is also totally incapable of critical thinking, even when there is the time for it (30. A prole is generally described as a junior, unskilled worker or someone who engages in routine or mundane labor.

That said, AI which surpasses human physicians may never appear. Even more likely is the possibility that any machine employing AI fails suddenly. There would certainly be situations in which AI is unexpectedly out of order. Machines cannot be perfect. Even if the AI is excellent and empathetic, some people would still maintain that human physicians are better for them. Some may even like physicians full of human traits, and we could argue that not all problems can be addressed using technology. In addition, due to legal and social problems, it is unlikely that fully automated and unmanned medical care given by AI alone will be realized any time in the near future. In any case, hoping for the best and preparing for the worst is the best approach to take. To this end, we present some potential countermeasures and limited proposals. While these are admittedly mediocre and perhaps commonsensical, we feel that no other innovative alternatives have presented themselves at the moment.

First, we must conduct clinical research and social investigations concerning problems surrounding the introduction of AI in our society. These issues may include matters such as healthcare outcomes, change in human relationships in clinical settings, the occurrence of health-related adverse events by self-diagnosis, and total medical expenses. We must also be carefully observant to note whether excessive use of AI causes personal social isolation, whether the emotional lives of individuals experience adverse effects, and whether the use of AI is influenced by economic conditions, patient backgrounds, or cognitive function. We must develop the AI technology through discussion and consultation among multidisciplinary experts, alongside those in the general public. At the same time, it is also important to clarify the patient and family expectations of medical professionals and of AI, and what type of collaboration they desire.

Second, developing guidelines for the appropriate use of healthcare AI to prevent abuse from happening is essential. It is also mandatory to continue with education in conventional medical ethics and professionalism; this should include that on COI management to prevent inappropriate or unethical behaviors by healthcare professionals, as it is predicted that advanced technologies concerning robotics and AI represent a big business idea, and that the market for AI healthcare will increase (23). We believe that the primary goal of medicine would remain the same even in an era of AI, as would the ethics therein. Investigating the psychological underpinnings of both patients and the general public as they are influenced by AI use is also important.

Third, the general public must be better informed of the appropriate use of AI. Literacy concerning AI must also be increased such that the general public can understand the limitations of AI, as well as the uncertainties of medical diagnoses and clinical interventions. This responsibility falls on the shoulders of those who intend to introduce AI into the general society; namely, healthcare professionals and IT companies. Furthermore, promotion of safe and appropriate use of such a state-of –art technology requires a more collaborative approach among different stakeholders including professional organizations, patient sides, and the general public/consumers (10). We also have to keep in mind that machines can break at any time, and thus our confidence in the functionality of AI must not be exponentially high. In general, our faith in science and technology should be tempered, and physicians should continue to hone their professional skills so that they would be able to help their patients in the event that a machine fails.

Fourth, we should not be hasty in giving up on important aspects of life, including privacy, freedom, justice, truth, trust, and moderation, to name a few. We must work to prevent our societies from becoming health-controlled societies that are based on an excessive health supremacy doctrine. Health is very important, but it is not the only absolute value. In order to ensure that our society possesses diverse values, scholars of biomedical ethics must continue to argue that science and technology cannot solve all the problems and troubles we face in the world.

Fifth, physicians must identify and cultivate the benefits of being a flesh-and-blood physician, asking "What is the strongest attribute that I have to offer as a human doctor?" While AI technology can be more reliable than humans due to its higher consistency in managing problems, healthcare professionals bring with them a personal touch and can deliver a wider range of assistance (23). That said, we must abandon the idea that human beings are automatically and unequivocally better than and preferable to AI, solely by virtue of the fact that we are human beings.

Finally, there seems a strong anxiety about one's own health and the anxiety could lead to AI abuse, birth of slaves of information, and totalitarian health-controlled society. We wonder how we can manage our stubborn anxiety about our health and life as a mortal existence Thus far, no good medicine that can treat our instinctive anxiety for health has yet become available. While we will not address this issue here, we do wish to emphasize that addressing the anxiety we all have about health and life is essential for the proper use of AI. Otherwise, many people would become slaves to information and suffer from AI poisoning.

List of abbreviations

AI: Artificial intelligence COI: Conflict of interests

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Measuring individual quality of life in Japanese women with high-risk pregnancies: clues for improving care plans and the hospital environment

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Abstract

We designed this study to assess the use of the Schedule for the Evaluation of Individual Quality of Life Direct Weighting (SEIQoL-DW) survey to elucidate individual QoL characteristics of pregnant women hospitalized at a maternal-fetal intensive care unit (MFICU) and to suggest personalized care planning initiatives that balance medical treatment and QoL for these women. We interviewed 20 pregnant women in the MFICU of a general perinatal medical center using SEIQoL-DW to assess their perceived QoL. We qualitatively analyzed and categorized the factors affecting individual QoL of 20 participants selected from the SEIQoL-DW replies and quantitatively evaluated the levels of importance and satisfaction of each studied variable. The women identified that their extended families were a constituent of their QoL and had a greater impact than anticipated by care providers. QoL was negatively impacted by even small periods of lack of care. The recognition that hospitalization ensured the well-being of the fetuses majorly impacted QoL of expectant women. QoL was higher in women who were able to maintain certain levels of hygiene and in those entertained during hospitalization.

1. Introduction

From 2000 to 2015, the rates of premature and low birth weight births in Japan have increased and currently range from 5.3% to 5.8% and 7.8% to 8.5%, respectively (Statistics of Japan 2015). The Ministry of Health, Labour and Welfare began to make improvements to the perinatal healthcare system in 1996 and established a general perinatal medical center in each prefecture (Nakamura 2000). The number of beds in the maternal-fetal intensive care unit (MFICU, the facility for inhospital care of women with high-risk pregnancies in danger of premature labor or those presenting severe hypertensive disorders of pregnancy, placenta previa, or multiple pregnancies) has increased from 66 beds in 1996 to 715 beds in 2014 (mean, 8.5 beds/10,000 births) (Ministry of Health 2014)

In Europe and the United States, short-term tocolytics are used for treating threatened premature labor; however, in Japan, rest and long-term tocolytics are the most widely used management/treatment methods that has evoked some ethical concerns (Tanaka et al 2004). The circumstances under which pregnant women are admitted to the MFICU vary widely and include cases with latent risk to those in hyper acute phases. The MFICUs comprise private rooms, large common rooms, and mixed rooms having individual and large common rooms. However, because ensuring medical management and safety of the mother and fetus are the main priorities, those hospitalized at MFICUs are restricted in their ability to move around and receive visitors; this has led some to experience lack of freedom and a sense of being confined (Togashi& Kaneko 2010, Nakazawa et al 2008)

Pregnancy is the preparatory stage for maternal role attainment; in this stage, women psychologically and socially prepare themselves by accepting motherhood as part of their identity and acquiring knowledge related to motherhood (Mercer 1981, Rubin 1967). However, highrisk pregnant women who are hospitalized in an MFICU during this stage tend to experience anxiety regarding their own and their fetus' health and are less likely to have a healthy awareness level of themselves as mothers (Matsuura& Shimizu 2016, Nishikata 2009, Tadenuma& Imazeki 2005). Conversely, positive experiences in hospitalized pregnant women with premature labor in MFICUs and obstetrics wards have also been reported (Imamura& Nakamura 2013, Lederman et al 2013), including the preparation for motherhood and deepening of bonds with their partners as they prepare for the rest of the pregnancy period and the upcoming delivery.

Only a few studies have assessed the quality of life (QoL) of women hospitalized in MFICUs. A survey using the comprehensive index "the Medical Outcomes Study General Health Survey-short Form 36 [SF-36]" (Nakamura 2012) reported that the scores of pregnant women with threatened premature labor were significantly lower than those of pregnant women receiving outpatient care or those of Japanese women in their 30s and that their "social functioning" and "emotional" scores were particularly low. However, standardized QOL measurements, such as the SF-36, have general definitions for the studied QoL constituents; therefore, they are useful for evaluating the QoLs of patient groups, but they do not take individual

patient situations and sense of values into consideration. The QoLs of high-risk pregnant women hospitalized in MFICUs are affected not only by their diseases and symptoms but also by their individual perceptions about their upcoming maternal role, their family relationships, and the hospital environment. One idiographic approach commonly used for evaluating an individual's personal perspective on their QoL is the Schedule for the Evaluation of Individual QoL Direct Weighting (SEIQoL-DW) survey (O'Boyle 1994), which is composed of "cues" given by the respondent herself that indicate the QoL impact areas and how the area is affected in each particular case. Monitoring individual QoLs has been proposed as a tool for care planning and follow-up of individuals in clinical practice (McHorney& Tarlov 1995, Wettergren et al 2009). Therefore, we hypothesized that the SEIQoL-DW survey can be used to generate ideas to improve the support and environment in MFICUs. We aimed to use the SEIQoL-DW survey to elucidate individual QoL characteristics of pregnant women hospitalized in an MFICU and to suggest initiatives for personalized care plans that balance management and the QoL of women with high-risk pregnancies.

2. Methods

Participants: The survey was conducted between June 2013 and March 2015 at a general perinatal medical center in Niigata, Japan. Total 20 pregnant women hospitalized in the MFICU selected by a midwife at that facility were included because they were deemed likely to maintain their physical condition or remain stable after hospitalization. All the participants signed informed consent forms for participation.

Data collection: We used the SEIQoL-DW manual to conduct the QoL survey and obtain the perspectives of the pregnant women (Hickey et al 1996). Administration of the SEIQoL-DW includes five successive stages, comprising both qualitative and quantitative assessments:

- 1. Background circumstances leading to hospitalization in the MFICU.
- 2. Cue elicitation: The participants were asked to indicate five areas of life (cues) that were the most important for determining their QoL during hospitalization in the MFICU. They were then asked to provide reasons for the choice of each cue.
- 3. Determining the current status for each cue: The participants were asked to assess their current satisfaction level for each cue using a vertical visual analogue scale (0, lowest; 100, highest). They were also asked to provide reasons for the assessment of their satisfaction level.
- 4. Quantification of relative weight for each cue: The participants were asked to subjectively weigh the five cues to indicate the importance as a percentage. We used the relative weighing to determine the relative importance of each cue (weight) among the others and used a specialized pie chart to represent the proportions (the complete circumference was considered as 100%). The participants were asked to provide reasons for their weighing assessments.

5. We calculated the sum of the satisfaction level × weight scores of each cue to obtain individual SEIQoL indices.

Data analysis: The audio-recorded interviews were transcribed verbatim, and the participants' statements were carefully read to describe the cues to identify the categories. Participants with SEIQoL index scores in the 75% quartile (high group) and in the 25% quartile (low group) were identified and compared in terms of the gestational week, gestational age of the fetus at the time of the interview, and the SEIQoL index. Statistical data (obtained using the Welch's test and Mann–Whitney U-test) was analyzed using the SPSS Statistics 23.0 software (SPSS, Chicago, IL, USA). P < 0.001 was considered statistically significant.

Trustworthiness: The main author (M.N.) collected the data and performed the initial analysis. The second (M.T.) and third (M.M.) authors repeated the analyses. The results were checked, and two independent researchers who are familiar with the Japanese version of the SEIQoL-DW survey and two other experts in the field of perinatal care made the necessary revisions.

Ethical considerations: The research ethics committee of the Niigata University School of Medicine approved the study (No. 1545). All participants were provided with verbal and written explanations of the study, and their written informed consent was obtained prior to study initiation.

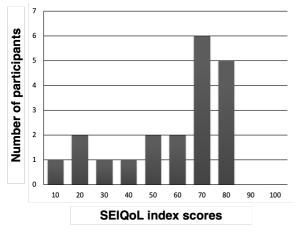


Fig. 1. Frequency distribution of the SEIQoL index scores

3. Results

Participant characteristics: The age of the 20 participants ranged from the early 20s to the early 40s. Main diagnoses made upon admission were threatened premature labor (16 patients), intrauterine growth restriction (3 patients), and deep vein thrombosis (1 patients). The gestational age ranged from 25 to 37 (mean, 28.9) weeks on admission to the MFICU and from 26 to 39 (mean, 32.4) weeks at the time of the interview. Overview of cues: We found 95 cues in total, with satisfaction levels ranging from 3 to 100 and weight scores ranging from 5% to 67%. Maximum, minimum, and mean SEIQoL index scores were 86.8, 17.5, and 62.0 ± 21.4, respectively. Because the data were widely dispersed, we did not observe a normalized distribution of the SEIQoL index scores (Fig. 1). We generated 13 categories from the cues and interview data. Table 1

presents the number of cues classified into each category, the number of participants providing cues in each category, and the mean values for level, weight, and level × weight. Figure 2 shows comparisons of mean values for levels and weights of the cues in each category.

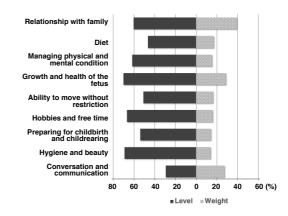


Fig. 2. Comparison of the mean values for categories' levels and weight

Comparison of the high and low groups: We found no significant differences in the diagnoses made upon hospitalization between the patients in the high and low groups or in terms of the number of participants undergoing intravenous therapy or the degree of bed rest required (Table 2). The results of the intergroup comparisons of the mean SEIQoL index scores indicated a significant difference at a standard of significance of 0.1% (Welch's test, t(8) = -9.302, P < 0.001). The median number of gestational weeks at the time of admission to the hospital (Mann–Whitney *U*-test = 10, not significant) and that at the time of the interview were not significantly different between the SEIQoL index score groups (U = 7.5, not significant).

Table 3 presents the cues indicated by the participants in the high and low groups along with the corresponding levels and weights. The most striking differences between the two groups were observed in the attitude toward one's "relationship with family" and "conversation and communication" involving friends and family as well as toward the "growth and health of the fetus" related to patients' fetuses. Two of the three cues related to "relationship with family" in the high group received levels of ≥80%, and six and three of the nine cues in the low group were evaluated as <50% and <10%, respectively. As expressed by the statement "(My nephew) is like my own child. We lived together and frequently saw each other, but now I can't see him" (#3), respondents in the low group felt lonely due to living away from their family members for whom they used to care. Such emotion was found even toward older children (#7) and pets (#4, #5).

In the high group, no cues were classified as "conversation and communication"; however, in the low group, three individuals gave such cues. However, as expressed by the statement "This is the first time in my

Table 1: Categories generated from the interview data and mean values for level and weight in each category

			No of	N6	Mean values		
Categories	Cues (samples)	Interview quotes (ID,level)	No. of Cues (n = 95)	No. of participants (n = 20)	Level	Weight	Level × Weight
Relationship with family	husband, caring for my older child, grandparents, nephew, dog, cat, my deceased mother, memorial service for my deceased child	"(My husband) worries about me. Although he is a homebody, he comes to see me all the time. And he contacts me too" (#10,100) "Is he getting enough nutrition from convenience store lunches? Will he not lose weight? I am worried about him because we are now living apart from each other" (#11,48) "It is hard not to be able to make an offering to my stillborn child. I only brought a framed picture from home" (#2,53)	23	17	60.2	39.1	25.5
Diet	diet, meals	"I am not satisfied with the hospital food" (#10,18). "While in the hospital, I became bored (with the food). I keep thinking, 'The same food again?'" (#11,11).	11	11	46.6	16.9	7.2
Managing physical and mental condition	rest, rhythms of daily life, mental control, intravenous drip, constipation	"When I am deciding whether to take a bath when my belly feels bloated, I come to the conclusion that I should not push myself when I feel this way and so I decide not to take a bath. I am really living as cautiously as I possibly can" (#13,78). "The IV (for the tocolytic agent) causes a lot of stress because I feel like I am restrained. I suppose (the IV) is necessary, but I just feel that there is too much stress" (#15,17)	10	11	61.7	15.2	16.6
Growth and health of the fetus	growth of the baby, hospitalization for the baby's sake, fetal movements, medical examinations and fetal heartbeat	"If I do not eat, it will affect the growth of my baby, and so I try my best to eat. I try to eat so that my baby will grow big" (#8,65) "When I feel the fetus moving, I know that the fetus is healthy. (That is) something important. It's the most worthwhile it makes my life here in the hospital worthwhile" (#15,100)	12	8	70.2	28.5	22.3
Ability to move without restriction	going out, looking at the scenery outside, can't do anything ,go to the kiosk(in the hospital)	"I would like to go outside the hospital room just for a little while. When I am in there (the MFICU), nothing special happens. I am always looking at the same scenery outside the same window. But, because there are buildings opposite, I can't see anything." (#3,30) "I feel separated from society. I would like to go outside and visit the kiosk" (#12,34)	6	6	50.8	16.3	7.5
Hobbies and free time	knitting, time spent reading, DVD, cooking show, watching soccer games	"Ithink it is due to having been admitted to hospital, I read books. I've got time, and I feel fulfilled. I usually don't have time to read, but in the hospital I can be alone." (#13,86) "During the time I spend watching (DVDs), I forget a lot of other things and that I'm in the hospital. This is a fairly good source of solace and comfort for me" (#17,100)	7	5	66.9	15.9	12.7
Preparing for childbirth and childrearing	making preparations at home for the baby, image training of the flow of delivery, ankle exercises	"I was looking forward to shopping for things I need for the baby, but I cannot shopping" [#11,25] "I am working on maintaining my muscle strength because I believe that will have an effect on my life after I am discharged from hospital" (#8,82)	6	5	54.0	14.2	8.5
Conversation and communication	conversation, emailing friends	"If I were able to exchange emails or talk with my friends that would at least be a distraction, but I cannot do that right now" $(\#7,7)$	5	5	69.2	13.8	9.8
Hygiene and beauty	bathing, skin care	"I brought my skin care goods from home, and was able to do my skincare without inconvenience. Despite being hospitalized, I was happy to continue skin care without any particular change." (#1,95)	4	4	29.3	27.3	7.7
Plans	filing tax forms, participating in my friend's wedding	"I have to submit my final tax return, but I cannot now." (#11,74)	4	3	60.8	22.0	13.1
Someone to consult	explanation from medical staff, pregnant women in the same room	"When I had concerns, the doctor explained things to me soon. As the atmosphere where it is easy to ask questions to midwives is pleasant, I am not so troubled." (#18,100)	3	3	94.0	19.7	2.6
Work	work	"In the end, I was hospitalized without completing my work duties, and so I hope things are ok at work. But I am worried about my job, and regret not having been able to do my job." (# 19,9)	2	2	19.5	11.5	18.8
Other	toilet, desire to be discharged early	"As there is a toilet in my room, I am unable to relax. Even if I go to the toilet at night, I worry that I will disturb every one (the thought is disturbing)." (# 18,26)	2	2	37.0	11.5	18.8

Table 2: Overview of participants in the High and Low groups

Low group $(n = 5)$	High group $(n = 5)$	p
3	4	
2	1	
4	3	
1	2	
4	4	
1	1	
0	1	
0	1	
4	4	
2	1	
2	3	
1	1	
29.5 ± 12.4	82.3 ± 2.7	$< 0.001^{a}$
29 (25-31 weeks)	28 (27–32 weeks)	0.599^{b}
31 (26–35 weeks)	33 (31–35 weeks)	0.289^{b}
	(n = 5) 3 2 4 1 4 1 0 0 4 2 2 1 29.5 ± 12.4 29 (25–31 weeks)	(n = 5) (n = 5) 3 4 2 1 4 3 1 2 4 4 1 1 0 1 4 4 2 1 2 3 1 1 29.5 ± 12.4 82.3 ± 2.7 29 (25-31 weeks) 28 (27-32 weeks)

a Welch's test

^b Mann-whitney 's test U

Table 3: Cues indicated by participants in the High and Low groups and the corresponding evaluations

	index scores		Cue 1	Cue 2	Cue 3	Cue 4	Cue 5
		c			T. C.	30	
		Cne	retal movements	Ankle exercises	Eating for the growth of the baby	Not straining myself	Kest
		Category	Growth and health of the fetus	Preparing for childbirth and childrearing	Growth and health of the fetus	Managing physical and mental condition	Managing physical and mental condition
8#	8.98	I piyel		. &		75	
		Weight	50	15	15	10	10
		Che	Hospitalization for the baby's sake	Fating for the gmwth of the baby	Rhythms of daily life	Moving	Dog
			amo fomo arrator romanador.		and from to committee the		
9#	82.7	Category	Growth and neatth of the fetus	Growin and nearth of the Jerus	Managing physical and mental condition	Ability to move without restriction	Retationship with Jamus
		Level	06	74	64	09	94
		Weight	57	13	10	10	10
		Cue	Knitting	Filing tax forms	Eating with my husband	Meals	Making preparations at home for the baby
		Category	Hobbies and free time	Plans	Relationship with family	Diet	Preparing for childbirth and childrearing
High group #11	81./	Level	100	74	48	51	25
		Weight	56	21	10	∞	5
1		Cue	Growth of the baby	Pregnant women in the same room	Watch soccer games	Cooking show	Knitting
		Category	Growth and health of the fetus	Someone to consult	Hobbies and free time	Hobbies and free time	Hobbies and free time
6#	80.5	Level	95	82	∞	52	19
		Weight	64	14	6	∞	5
		Cue	Visit with husband and daughter	Hospitalization for the baby's sake	Bathing	Go to the store	Desire to be discharged early
		Category	Relationship with family	Growth and health of the fetus	Hygiene and beauty	Ability to move without restriction	Other
#2	0.08	Level	85	7.1	82	. 85	48
		Weioht	50	17	17	6	7
		Cne	Husband	Cat	Meals	Skin care	Buying things for the baby
1#1	49.3	Category	Relationship with family	Relationship with family	Diet	Hygiene and beauty	Preparing for childbirth and childrearing
1	?	Level	81	17	41	95	9
		Weight	34	31	13	11	11
		Cue	Health of the baby	Husband	Dog	Family	
**	,	Category	Growth and health of the fetus	Relationship with family	Relationship with family	Relationship with family	
†#	51.5	Level	12	47	32	81	
		Weight	44	28	20	8	
		Cue	Conversation	Meals	Can't do anything	My deceased mother	Mental control
	000	Category	Conversation and communication	Diet	Ability to move without restriction	Relationship with family	Managing physical and mental condition
Low group #10	7.97	Level	8	11	53	82	69
		Weight	39	25	16	13	7
1		Cue	Caring for my older child	Emailing friends	Meals	Constipation	Eczema on the face
ţ	0	Category	Relationship with family	Conversation and communication	Diet	Managing physical and mental condition	Hygiene and beauty
/#	8.02	Level	9	7	55	55	55
		Weight	36	22	10	01	
		0	- N		1 -11:	37	W-4-
		Cne	Nephew	Grandparents	Looking at the scenery outside	Conversation	Work
#3	17.5	Category	Relationship with family	Relationship with family	Ability to move without restriction	Conversation and communication	Work
	i i	Level	3	4	30	30	30
		Weight	24	23	19	19	15

life that I have spent so much time not talking to anyone. Other than my family... I mean, I really have no chance to talk to anyone else" (#16), the level was evaluated as $\leq 30\%$.

With regards to "growth and health of the fetus," six cues were given in the high group, and five of those cues were given a level of ≥60%. Statements included "I am hospitalized to give birth to a healthy baby" (#5). In the low group, there was only one cue belonging to this category, and anxiety was expressed by the statement "I am worried about whether my baby will be born healthy and normally or with some illness." (#4), which was given a level of 12%.

Two participants in the high group and none in the low group indicated cues related to "hobbies and free time." These women found a way to spend their spare time arising from hospitalization, such as watching cooking shows and knitting. Moreover, two women each in the high and low groups gave cues about "managing physical and mental condition," with levels of ≥50%; however, the contents of the cues differed. In the high group, a woman understood that her pregnancy could continue by avoiding exertion and staying in the hospital, as indicated by her statement "when I move too much, my abdomen contracts, and so I spend my time lying down and not moving" (#8). In the low group, as indicated by the statement "my constipation is not getting any better. I have changed medications since becoming pregnant and so I cannot control (my bowel movements)" (#7), the woman was stressed by the hospitalization and treatment, and she was unable to manage her own discomfort out of consideration of the impact on the fetus.

4. Discussion

Our results indicated that the SEIQoL-DW survey identified potential areas that care providers may have overlooked, where support is required by women in the high-risk group. Pregnant women who were separated from their families because of hospitalization and those who were under bed rest treatment experience increased stress and frustration (Cunningham 2001). In the present study, the participants who were unsatisfied with their family relationships felt the need to take care of their family members. However, this need was extended much further than what the medical care providers thought (i.e., husband, children, and parents), and included grandparents, nephews, and pets, as well as deceased children and parents. Hospitalized women with high-risk pregnancies are often seen as being cared for by family members; however, they see themselves as caregivers responsible for their family, and being unable to fulfill this role even temporarily negatively impacts their QoL. In the MFICU, the survey was conducted faceto-face because telecommunication was restricted (as in most MFICUs throughout Japan). Children are not allowed to enter the MFICUs, and family members' visits are practically restricted to an open space outside the MFICU. In addition, the use of mobile phones is prohibited in the MFICU. This results in the patients getting very few opportunities to engage communication, which is normally how individuals maintain their societal ties. Midwives and nurses who are interested in managing the threatened premature labor symptoms of pregnant women limit their conversations with the pregnant women to topics related to their symptoms and management; this leaves the pregnant women feeling that their psychological needs are being neglected (Ejima 2009).

According to our results, the women who recognized that their fetal well-being was maintained by their hospitalization in the MFICU felt that by resting they were contributing to the health of their unborn child, and their QoL assessment reflected this aspect. In contrast, for the women who did not understand this aspect, the growth and health of the fetus was not a constituent of their QoL. Providing information pertaining to fetus health and pregnancy continuation to women with high-risk pregnancies is important to improve the quality of women's care, provide guidance about the management of stressors, and plan interventions to reduce stress and involve their families (Richter et al 2007). It is difficult for the women to selfassess whether the health status of their fetus is progressing well. Therefore, it is indispensable for the medical staff to provide them with periodical and detailed information.

The SEIQoL-DW survey allows evaluators to assign cues to the domains they consider important. This becomes a form of direct evaluation and allows the evaluators to ignore the irrelevant domains. The women who were anxious about the health status of their fetus did not feel that they themselves were directly contributing to the sustained health and growth of their fetus, and they may have not considered fetal health and growth as a constituent of their QoL.

Among the constituents of QoL related to personal well-being, the women identified the cues they were satisfied and unsatisfied with. The women were concerned that they were unable to "soak in a bathtub daily," which is common in the Japanese lifestyle, and were unhappy with certain hospital restrictions, such as that indicated by the statement "I have to use the shower at the same time as another inpatient once a day." Many pregnant women hospitalized in MFICUs spend most of their time resting in bed and engaging in entertaining activities; these women gave high evaluations to activities, such as watching DVDs and knitting, which were considered treats not available to them during their normal daily lives owing to time constraints.

However, the desire to enjoy meals and move freely led to dissatisfaction in the MFICU. It is possible that the restrictions imposed due to hospitalization led to stress in the women. The limited variation and choice in the menu of the Japanese hospital food service have been up for improvement since few years (Nishiwaki 2014). However, in the institution wherein our study was conducted, >50% of the participants considered meals a part of their QoL, the evaluation of which was not high. These results indicate that the food service of the study hospital should be improved to increase the level of satisfaction. Midwives and nurses of the MFICU are aware of the sense of being "confined" and "controlled" felt by the women in the high-risk group (Togashi& Kaneko 2010, Mu PF 2004). However, assistants for strolls and wheel chair movements, like those in elderly care facilities, are rarely available even for pregnant women with stable symptoms due to care providers' perceptions of prioritizing bed rest.

Improving the care environment of MFICUs: The results of our study indicate the need for several initiatives for improving the OoL of hospitalized pregnant women in MFICUs. These include investigating whether spaces for private visits can be implemented to give families the time required to allow the patients to maintain ties with their partners and to adjust to transient circumstances, to allow longer visitation times, and to allow family members to spend the night at the MFICUs. Maternity wards in Japan often have notable restrictions, including prohibiting small children from visiting to prevent infection transmission (Tamura et al Implementation of basic infection prevention measures (standard precautions, checking children's vaccination records and history of infections, checking for fever, etc.) may allow relaxation of these restrictions.

The second initiative concerns the need to keep hospitalized pregnant women in MFICUs, make them feel anxious about their fetus' health status and growth, and keep them visually and orally informed about the results cardiotocograms and diagnostic ultrasound examinations so that they can gain a sense of the "growth and health of the fetus." Pregnant women hospitalized in MFICUs usually do not have much time for consideration before being admitted to the hospital. Therefore, medical professionals should provide them with detailed information regarding daily changes in their own and their fetus' health status and other types of positive feedback that allow them to understand the significance of their hospitalization.

The third initiative is concerned with the hospitals providing certain women's needs to support their own lives. Pregnant women need to understand that some aspects of their lives will change because of hospitalization; however, the hospital could also ensure that some aspects do not change. Hospital staff and pregnant women should work together to modify important aspects. We propose the use of plants for relaxation (Hasegawa & Shimomura 2014) and creating areas within the hospital wards for DVD viewing and reading as methods to facilitate psychological adjustment to the temporary stay and mandatory bed rest so as to reduce physical problems and psychological tension and anxiety. Meals and the ability to move freely were QoL cues identified by the patients; however, the women were not fully satisfied, and therefore, improving these services may improve the women's QoLs.

5. Conclusion

Our study results indicate that the SEIQoL-DW surveys can be used to elucidate the characteristics of individual QoLs of women with high-risk pregnancies and that they provide clues for improving care plans and the hospital environment. The women identified their extended families a constituent of their QoL to an extent greater than that anticipated by the care providers; furthermore, although temporary, the fact that the women could not care for their family members negatively impacted their evaluation of the QoL.

The possibility of relaxing visit restrictions and ensuring a space for visits to spend some private time with one's family should be explored. Hospitalization was considered to contribute to the growth and health of a fetus; this perception turned out to be a major constituent of their QoL; therefore, the medical staff should provide women with detailed information on the health status of their fetus. The women were not satisfied with their meals or with the restrictions imposed on their movement; therefore, improving these services may improve the QoL of hospitalized pregnant women.

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A race inside the body: decision of the fate of newborn

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Abstract

Sex-selective abortion is the killing of a girl fetus merely due to its gender. It has become an emerging problem in developing countries mainly due to lack of resources and cultural stereotypes. Illegal abortions have increased and are jeopardizing not only the gender ratio but also the health of the mother by exposing them to complications and violating their rights. The aim of this paper is to evaluate a case scenario based on many ethical dilemmas and questions that arise form it. The paper presents the problem in light of major ethical principles and theories by counteracting each argument with a counter

argument. Pakistan is a country with increasing population and gender misbalance. Hence, it is crucial to view the positive and negative side of the conflicting situation considering the larger benefit and bigger impact. Government and institutions can implement many strategies to protect the rights of women and put an end to the race between X and Y chromosome.

1. The scenario

Pregnancy news brings happiness, excitement and hope to the family. But, some wicked thoughts and unawareness, changes a joyous birth into a tragedy and a heart-wrenching story. A case of 35 years old married woman was evaluated. She was a mother of 3 daughters, belonging to a middle-class family, who came to a tertiary care hospital with intestinal perforation. Upon investigation, it was identified that the lady underwent unsafe abortion at the 7th month of pregnancy in a local hospital and thus ended up with the complication. As a matter of fact, this lady underwent abortion because an ultrasound showed the fetus of a baby girl. According to the patient, her family and husband wanted a baby boy and thus aborted the baby girl. Since it was the critical stage of pregnancy only a local hospital agreed to do the abortion.

2. Discussion

This case is of extreme ethical and moral importance as it poses direct threats towards the future and safety of our society that needs immediate action.

- 1.Is it ethical not to provide justice to the fetus that is aborted on no logical grounds?
- 2.Is it ethical to expose the mother to complications and further deteriorate her health?
- 3.Can beneficence for baby justify maleficence to mother?
- 4. Is it ethical to disclose the gender of the baby before birth?
- 5. Should healthcare providers adopt paternalism?
- 6. Should communitarianism outweigh liberalism?

These are the questions that should strike on the mind of every individual who witnesses such scenarios. This paper will discuss these questions and the possible solutions towards this problem on the grounds of ethical principles.

Pakistan is a revolutionary society and transition is the core of it. The sex ratio of Pakistan according to the census of 2017 is 105.07[1]. This indicates that only 100 women are there for 105 men in Pakistan. Percentage wise 51% are men and 48% women. This imbalance in gender ratio is a potential threat to social peace in our country. Roughly, 890,000 induced abortions happen that means 1 out of 6 pregnancies are terminated dangerously annually [2]. Gender preference is one of the highlighted reasons of induced abortions in Pakistan and is increasing in numbers [3].

3. Consequentialism vs egalitarianism

Consequentialist argues to make decisions based on the consequences that decision would impose on the individual or the society [4]. Similarly, the situation becomes worse for that newborn baby girl when she comes to world as an unwanted child. Thinking about that newborn baby girl, she might be killed, she might be

sold or may be misused. If that does not happen she would become a target of gender biasness, she would be deprived of her right of education. She would be a sufferer of domestic violence, as she grows up, making her life even more miserable. Considering such adverse consequences, abortion on the basis of gender should be permitted to save the majority from further social harms. Therefore, decision should be based on consequences and not equality for everyone as opposed by egalitarians.

Every life becomes a story and that story starts from the womb and every unborn deserves justice because it has life and is made by God. Egalitarian theory suggests equality and justice for everyone. This means that every life should have equal rights and must be treated with justice based on all grounds. Pro-life concept argues in a similar way that gender of a baby poses no threat to the life of mother or does any harm to the society and family [5]. No baby should be aborted on the basis of gender. It is an inhumane behavior, which is unacceptable. Justice is the basic principle and all individuals should be considered equal irrespective of their gender [4]. approach egalitarian consequentialism and no abortion should be done on the basis of gender, as every life is precious and equally important.

4. Autonomy vs beneficence

Mother is an autonomous human being, with every right to choose for herself. She has full reproductive autonomy. It is her choice whether she wants to be a mother or whether she wants a baby girl or not. On the grounds of pro-choice theory, only mother can choose between aborting a baby or not and it should be considered right [6]. Baby has not yet come into being, but mother is already alive and has multiple responsibilities. She might choose this to not let her baby girl suffer in this cruel world; therefore, mother holds complete autonomy in her life and decisions. Another instance where abortion should be permitted is the mother or father's hatred for a particular gender. If the parents are suffering from any psychological illness and seeing a girl or a boy neonate can aggravate their illness, then in that case abortion due to the gender of the baby might be morally right and safeguards their autonomy.

On the other hand, paternalism is an action to limit the persons' autonomy for their beneficence. Health care providers could do paternalism by not disclosing the gender of the baby, which could have caused beneficence for the baby. Moreover, paternalism would be done to save mother by not aborting the baby at 7 months of pregnancy that posed debilitating effects on mother's health. Therefore, mother's or family's autonomy could be overridden for their own benefit and such complications could be prevented.

5. Liberalism vs communitarianism

Liberalist suggests that it is one person's choice and wish that whether they want to have that baby or not and it is thoroughly their autonomy [7]. Liberalist argues that any parent would want to have sex selective abortion on the grounds that they want equal gender in their family and it might not be the preference for one gender but equality for the both the genders. Therefore, it is a single person's wish or idea.

In contrast, communitarianism theory argues that if abortion is made legal based on these terms then it can pose devastating effects on our society. If parents are allowed to choose the gender of their newborn then it changes the relationship between parent and child from one of 'gift' to one of 'contract'. Selecting the gender, eye color, skin color of their baby totally changes the baby from a blessing to a commodity. Moreover, hatred for a particular gender affects the views of everyone. The children of such families will have biased opinions and less respect for girls and would disrupt the education system by creating havoc of bias [8]. They are threatening to society, as social and cultural norms are based on the upbringing of future generations [9]. Therefore. following utilitarianism and communitarianism approach, sex- selective abortion should not be allowed for the good of majority.

6. Our position

Our position is clearly against sex selective abortion. Gender biasness is deep rooted into social and ethical problems. If sex selective abortion were legalized than gender discrimination would prevail in society. People would solely prefer boys to girls because of the gender stereotypes already developed in our society. In our society, a female baby is always associated with the system of dowry, considering her as a burden on family. However, the family of male child holds advantage of receiving dowry. Males are considered as the bread earner of the family. Males are allowed more freedom and security in the society. Consequently, society would be exposed to more discrimination. Moreover, Islam also does not permit sex selective abortion. Islam at all instances talks about gender equality and justice to everyone and states that no one has superiority over other. The Quran discourages Muslims from favoring one sex over another when having children as mentioned in Surah An-Nahl (16:58-59). Therefore gender-based selection of the baby should not be allowed. Moreover, according to the feminist theory every gender is equal with equal rights and status. On these bases sex selective abortion should not be legalized.

7. Consequences

The consequences of our position would be in the beneficence of the society but would do maleficence to the mother and baby born. At the level of society, the ban on this sex selective abortion would promote gender balance in society. If the balance in sex ratio were maintained then the society would be in harmony and the number of social crimes will be reduced. Additionally, sex selected babies would consider themselves as priority over other babies leading to disharmony in society and more bias. However, this would force people to keep producing babies until they are satisfied with a baby of their choice and make the babies suffer in poverty and hunger. Consequently, mothers would become victims of domestic violence in crime of giving birth to a baby girl. They would be forced to undergo unsafe abortion at late trimesters and would end up in complications and suffering. Moreover, the born baby might face partiality and violence. Nonetheless, these negative consequences can be countered by several interventions of bridging up this gender gap.

8. Conclusion

In a nutshell, discrimination based on gender is profoundly embedded in our society and culture. It would take years and years to uplift woman's significance in our society, guard their rights, and consider them as equal members and ultimately sustain their dignity and self-determination. Child's gender should not be perceived as determinant of their future and status. In the hospitals, ethical committees should deal such cases and counseling of the family or the mother should be done. Nurses should be educated to directly report such incidences without any fear. Pros and cons of the situation and their harmful effects on the family's future should be explained. Most of these actions are done due to misconception, unawareness and societal pressures, which could be dealt effectively.

At community level, nurses need to work through eliminating gender labels, promoting female education; their rights in domestic life and providing them with equal opportunities. Importantly, awareness of role and status of women in societies in the light Islam should be enlightened by removing the misconceptions of patriarchal society. Moreover, social stigmas associated with any gender should be eliminated to counter such preferences. Additionally, ultrasounds should not be used to disclose the gender of the baby. This would cause problems for the mother, as she would have to undergo unsafe abortion due to familial pressure and jeopardize her health.

Furthermore, illegal abortions should be of high priority for the government to take actions on. Immediate banning of such actions should be done. Multiple audits should be done to ensure no performance of unsafe abortions in the state and punitive measures should be taken against those who practice unsafe abortion. Moreover, awareness campaigns through social media and public sessions should be conducted about hazards of unsafe abortion and revolutionary gender rules and equalities. A hotline service should be started for women to reach out in case of forced abortions or domestic violence.

In the end, ban on sex selective abortion is not the way to achieve these goals, as they do not cure the core problem. This reduction in discrimination is possible by shifting our concern towards addressing circumstances that initiate this partiality. Female education should be available at easy access and within the community, so that it influences and welfares at the grass root levels. Moreover, their fundamental rights, and security should be reinforced. Non-governmental organizations should be self-reliant to develop an in depth understanding of hurdles and taboos against women and formulate operational and pertinent campaigns to eradicate the root causes.

Likewise, system of dowry should be banned in our societies so that no one considers the baby girl as a burden on them. As the part of making policies regarding these recommendations, representatives of women from urban and rural areas should be involved in implementation strategies. In a nutshell, only if the thinking and perceptions change, only then this world would be a better place for newborn female children. The apprehension is that sex selective abortion would

reinforce gender discrimination and disseminate gender norms negatively.

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