

Transhumanism and improving quality of life in the elderly:

How could it shape the future of pain and suffering in the elderly?

El transhumanismo y la mejora de la calidad de vida de las personas mayores:

¿Cómo podría configurar el futuro del dolor y el sufrimiento en las personas mayores?

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Abstract

It is postulated by 2050, the world population of the elderly, 60 years and above, will peak at about 20% of the total global population and it is expected that the plethora of age-related issues will be a strain at every stratum of life and radically change health-care policies from

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individual to national levels. Besides the financial, social, and health implications, published data has also emphasized a lack of religious affiliations in the older to oldest age groups, therefore potentially, causing this segment of the population to become unconstrained by religious philosophy and teachings on improved technologies to alleviate pain and suffering.

This first part of the article evaluates various aspects of how the religious practices traditionally view suffering and pain, as seen through the lens of the three monotheistic religions-Judaism, Christianity, Islam as well and Buddhism.

Next, we explore what values and experiences religion brings to the elderly in navigating pain and suffering and how intricately bound they are to the doctrines and teachings. We also look at the gaps in the current treatment patterns that could affect the access of the geriatric population to choose newer modalities, if feasible.

Subsequently, this paper explored how transhumanism in the advancement of technology and being unaffiliated to any religion may cause a seismic change in elderly people's pain perspectives and sufferings, and how this potentially could change the face of gerontology.

Keywords: faith, aging, pain, suffering, religious beliefs, transhumanism, technology, quality of life, QoL.

1. Introduction

Time dictates all life, be it on planet Earth or in the cosmos, and on its race towards the unknown, it transcends the confines of the human mind and logic, passing through events from the past, present, and future (1). Humanity caught up in this whirlwind of time, and races from being a single-celled organism to a complex, myriad of cells bound by the laws of nature destined to age (2).

Since the time of Aristotle, and Plato, and their views of aging to other prominent Greek philosophers, the philosophical debate of aging, ageism, and even what is healthy aging continues as we appreciate its multilayered complexity and its associated parameters (3). Ancient Roman philosophy equated a certain stoicism among the

elderly in that their journey is a path well-trodden, sprinkled with trials and tribulations, and to quote Ray Laurence, Professor of Ancient History at Macquarie University: “Stoicism is almost like an old person’s philosophy,” (4,5). One could see ageism rearing its ‘ugly head’ and it appears that this mindset has not changed over the years to present times.

A question that begs to be asked, before we continue is “How Old is Old?” (6). This is a rather polemic question as there appears to be no set standard and it can vary according to gender, ethnicity, geographical location, and health situation; the peril here is that if taken out of context, it would be stereotyping and may fall back into a pit of negativism. Meaning that one can feel old at 45, either due to subjective reasons or some organic problem and conversely be ‘young’ at 70 (7). This conundrum must be understood before diving into aging and its consequences.

However, it is sufficient to say, that aging is an inexorable part of human life and ultimately leads to one’s demise, with the collapse of all physiological and biological functions that maintain the life of the human person along with his or her dignity (8).

With the projected world population of the elderly, 60 years and above, peaking at about 20% by 2025, it is expected that the plethora of age-related issues will be a strain at every stratum of life and radically change healthcare policies from individual to national levels with financial, social and health and even religious implications (9).

The premise that the aging process is fraught with ease is not always true as the goal has been to attain a good and acceptable quality of life continuing to do what is of value to them with minimal assistance and support. This is enshrined in the *WHO work on the UN Decade of Healthy Ageing (2021-2030)*, clearly setting out guidelines and programs working through Government bodies, policymakers, social networks, NGOs, institutions, and all relevant stakeholders for everyone to live a longer and healthier life through sustainable methodology (10).

However, the caveat of this endeavour is to capture the elderly before chronic diseases set in so that this project is successful before

pain develops into long-term suffering which inevitably causes the downward spiral of the entire emotional, physiological, biological, and psychological makeup of the elderly leading to their debilitation and subsequent painful demise (11). Therein lies the difficulty for such policies along with numerous endeavours to improve the livelihood of the older person and to get them to a stage before the downward spiral starts is the challenge for health services and policymakers. As alluded to earlier the stereotyping is embedded, as it would not make a difference in changing how the elderly copes as against channelling the same resources to individuals with better outcomes- the young (12).

Another concept that must be understood with clarity is that aging to some extent is susceptible to several external factors as well as chronological and biological aging (13). Both these parameters are tangential, in that biological aging centres around how well the individual/s is aging, whilst the former is a number since birth and maybe strive with disabilities and maladies. Hence policymakers and agencies must wake up to the fact that policies must evolve and that there can be more blanket solutions to address this segment of the population.

2. Pain and suffering through the lens of the elderly

Traditionally, one would associate pain and suffering with an older person, making this segment of the population dependent and unable to perform activities- this however is a classic example of ageism and has become a prevailing view of how we look at the elderly (14).

But before we go into this very contentious topic, we need to clarify if aging is always associated with these negative physical components. Aging is not something that happens at a 'spur of a moment' but rather over the course of the life span and the choices the individual makes will determine whether he or she will age gracefully or successfully (15). These choices include how to accept certain limitations.

Active aging or successful aging is determined by some parameters in which there is a low incidence of physical limitation, good cognitive function, non-communicable diseases that are very well managed, good social interactions, and the ability to cope well with the stressors of life, surmounting to the concept of a life lived and still living well (16). Suffice it to state, that numerous published papers qualify and quantify the above statement along with strong methodological and theoretical tools to determine the period when there is active contribution and subsequently the period of senescence, in which the humans deteriorate (17).

Pain and suffering are an intrinsic part of being human. Emotional and psychological events, physical trauma, grief, etc contribute to this state of physical and emotional lability (18). With prolonged suffering, the sufferer assumes a state of passivity and a sense of isolation, and this vicious cycle results in an unwarranted state of false acceptance and that nothing can be done.

This ‘inevitability’ seems even more amplified in the aged segment, and this now elicits a sense of concern among observers’ which now triggers a moral sense to care or alleviate the suffering of the sufferer (19). Avenues are sought to ameliorate these episodes of suffering of pain and to some extent justify it by ensuring the sufferer does not succumb to lack of integrity and dignity, inability to age well because of the said suffering.

Is pain and suffering therefore inevitable in the elderly population segment? Not necessarily true, an article by Stephen Thielke and colleagues goes a long way to dispel commonly held thoughts that the elderly seem to hold proprietorship over this phenomenon. He explores four commonly held myths and posits that there are certain clinical practice stereotyping that must be changed especially among health care practitioners to navigate this conundrum that envisages this false concept (20).

Having said that, while not inevitable, when pain and suffering do occur it is very debilitating and can cause inexplicable emotional, psychological, and physical disability, higher dependence, and increased

financial burden to state and family and lastly creating situations of seclusion and abandonment (21).

3. Religious perspectives of pain and suffering and why it happens

The three monotheistic religions, which can be traced back to Prophet Abraham and the belief in One God, are quite clear in their view of pain and suffering, in that it is redemptive and salvific (22).

The Judeo-Christian faith views suffering at great length, with St John Paul II, alluding to this phenomenon as that only in Christian scriptures, do we find the true meaning of “why the suffering” and that it is a plan of eternal love from God and a key component of suffering that it is redemptive in nature with an eye of eternal salvation (23). We are told by the story of Job, who is plagued and beset by tragedy after tragedy. Initially, the authors summarized this trend of suffering as failings to lead a good and holy life, however, we are told that Job pleads his innocence and ultimately as the story goes, Job is redeemed.

The key point that St. John Paul II brings across in this reflection that the suffering that Job underwent as part of a bigger plan to demonstrate Job’s righteousness. Hence, we can see that Judeo-Christian theology promotes the idea that suffering must be embraced as an embodiment of the mystery of God’s love for mankind and His promise of eternal salvation (24). Therefore, the prevailing view is that there is a value to pain and suffering and that it is redemptive, as mentioned earlier.

A point that needs to be alluded to is that in Jewish sacred texts, suffering is very much an ethical issue with an adequate response that is needed, therefore there is a role for medical intervention, and in that response, there is this personal contact between two parties that transcends the mere physical contact but at an emotional and psychological level (25). The moral perspective centres around the need for justice and dignity for the oppressed against the aggressor.

To add, the Jewish philosopher, a rather polemic Martin Buber, posits that *evil is a turning away from good into a 'nothingness'*, a reminiscence of the ancient view that suffering is a punishment of an evil act, put forward by Maimonides, a Middle Ages influential Torah scholar (26). Buber built on his theory that there must be an existential relationship between God and man, something tangible, not abstract in nature. Therefore, Judaism accepts the reality of suffering and pain and that it is unto humanity to remedy it where it can- with empathy and to accept and acknowledge areas where nothing can be done. A key component that must be highlighted is that the Judeo-Christian faith views that pain and suffering are not fatalistic.

In Islam, the thought is that the fundamental values of life are worth living and that the journey of life is inseparable from suffering (27). Therefore, the premise is that life can be difficult, with joys, sorrow, grief, and pain all intertwined, and that it serves a higher purpose divine revelation of God's love. It is a continuous struggle and awakens in the believer, the faith journey that needs to be taken. Therefore, the narrative from the Islamic scriptures builds on the human struggle and its journey.

An extremely important point, at least in Islam, is that there is a difference in how it views pain or affliction versus suffering (28). Modern Muslim scholars such as Tahsin Görgün, allude that the Western view is tangential to the Islamic view of pain and suffering and that understanding the difference is key to inter-religious psychological support to people of different faiths, especially in times of public health emergencies and when dealing with older persons.

Buddhism views suffering as a path to Enlightenment (29). Four truths allude to suffering and *dukkha* suffering, which ranges from the physical to the mental, aging, distress, and existential suffering. A journey is required, and life is not destined to be nothing but suffering, but the means of finding liberation from suffering is always available. This leads to finding or exploring all possible avenues and acting on it is an element of the Buddhist path.

Identifying suffering and pain and its causative agents in illness, the aging process or extreme psychological and emotional trauma is

key to understanding human nature and awakens the understanding in the realization of preventive coping mechanisms (30). This knowledge prepares the believer to be compassionate to other people's needs and alleviate their pain.

Buddhism is rather unique among mainstream religions in its philosophy of allowing the sentient being to 'evolve' in a manner of speaking, amalgamating its core values, with the use of acquired knowledge to reach out with compassion and care (31). Central to its beliefs and vows, it allows the use of cognitive evolution to attain perfection which then translates to the ability to extend innovative care to the suffering and those in need.

One can safely assume that the cognitive expansion or evolution of humanity is already in place, as we see the usage of Artificial intelligence driving physical structural, biological, and physiological enhancements (32).

4. Role of religion in navigating pain and suffering among the elderly

We now have seen how different religions view this phenomenon, therefore let us see its role on the faithful, especially in the older population on how they reconcile these difficult moments through their faith.

The basics of understanding how older individuals are beset with multiple medical issues and faced with complicated treatment regimens, we need to understand what values matter at this time of great difficulty. Several qualitative and quantitatively studies have been done to understand what matters and a couple of key themes resonating throughout, namely, lack of communication, having trouble managing the disease physically and emotionally, lack of impetus to carry on living, a strong belief in hoping that a cure will happen either through a miracle or through new or existing medical interventions and lastly being surrounded by friends and family, meaning social contact (33). These values or expectations seem to gravitate toward

a desire to overcome the pain and suffering that the individuals are presently going through.

For this article, the value that would be discussed would be the importance of religion or spiritual well-being as a coping mechanism with whatever resources are made available. Few qualitative studies have shown a strong correlation between religious beliefs and practices as having a strong effect on coping and adapting to the current situation of an elderly experiencing suffering or pain (34).

The coping mechanisms are essential as the suffering older person is experiencing a traumatic period and the need to find some tangible tool or method is important. There is a great need to improve the quality of their current life and evidence has shown that Quality of life (QoL) is a key component to health outcomes (35).

A cross-sectional study has shown that Taiwanese elderly patients with heart failure have very poor QoL, this is probably reflective of the situation in most countries, leading to depression and other psychological comorbidities (36). Poorer the outcomes if one was to factor in sociodemographic inequality and lack of resources, therefore religion offers a dimension to experience comfort and support either through a communitarian perspective or through individual experiences.

The conceptualization of religion or spirituality in the elderly going through pain or suffering is individualized and multilayered and is built upon either past experiences or current revelations and can offer a path forward (37). A strong belief in a higher power or God, allows the older person to place their hopes on a benevolent 'Father-like figure' who would help them through this journey.

In Catholicism, the writings of St John Paul II, in his apostolic letter *Salvifici Doloris* very succinctly states in SD29 (38):

We could say that suffering . . . is present to unleash love in the human person, that unselfish gift of one's "I" on behalf of other people, especially those who suffer. The world of human suffering unceasingly calls for, so to speak, another world: the

world of human love; and in a certain sense man owes to suffering that unselfish love that stirs in his heart and actions.

Hence the challenge and the urgent need of the suffering elderly, one in pain, to reconcile with themselves and the community in a spirit of free and unconditional love and that is the journey that spirituality or religiosity offers.

Having seen, how this concept of spiritual well-being and religion plays an important role and is bound by its dictum, it appears that the older person would adhere to its teachings so that they don't transgress the promises and most importantly the eternal joy that is to come (39). Hence, any attempt to alleviate the symptoms must or rather needs to follow the teachings or the doctrines that are set out in the related religions- be it in traditional or non-traditional medical interventions, usage of new technologies, and most importantly end of end-of-life decisions.

Having said that, a study published by Vegard Skirbekk and his colleagues in 2016, might paint a worrying picture for religious bodies, aged social networks, Government agencies, and ultimately financial institutions, where there is purportedly a rise in those without mainstream religion or unaffiliated religion among the old and older population (40).

It was noted all the main religious groups would have an increased elderly population base- by 2050, six of the eight religions (Jews, Christians, Muslims, Hindus, Buddhists, other religions, folk religions, and lastly unaffiliated) have greater shares of aged 60+ than aged 0-14 (40). Interesting to note that the unaffiliated (the crux of the problem), would increase among the 60 years and older by 13% in 2010 to 32% in 2050. The findings allude to the younger groups who may be either agnostic or atheists, rates of secularization among the younger people who live in countries with lower fertility rates and longer expectancy of life who subsequently age rapidly and therefore tilting the balance towards those unaffiliated to a religion.

This would have major downstream effects at every level of society, including healthcare support especially the type of counselling services offered and even how far and how much of the types of palliative care can be offered, this could potentially reignite the contentious issues of euthanasia and other forms of assisted demise. While published data has shown that social interaction and religious support are integral to a healthy lifestyle, aging, and improved QoL, a shift or rather lack of a spiritual anchor would or could potentially affect outcomes for those in pain or suffering (37).

Secondly, the young generation that has moved to the older group, is familiar with newer technologies and the benefits they can bring to life and even in mitigating pain, meaning using biological modifications to improve QoL and even extend longevity (41). Numerous social problems could arise such as parallel populations of those who have access and those who don't have among the elderly, leading to a myriad of economic and financial problems for caregivers and authorities.

An interesting observation found in the Skirbekk paper was that by 2050, we would see an increase in the aging population of the Buddhist and the unaffiliated religion segment and geographically most of those practicing Buddhism would be found in Asia Pacific, while those in the unaffiliated group be scattered in West Asia and the Western countries (40).

Will this open the possibility, where the shifting ideologies of how we perceive what is best in terms of aging well or rather aging successfully? (42) We are not looking at isolated communities or pockets of the elderly population looking at newer possibilities but rather at a global issue where prevailing thoughts or boundaries that curtail delving into enhancements could radically change, opening new opportunities for advocates of longevity and biological enhancements to leverage on.

A key question that must be asked before, one embarks into newer therapies for anyone is, are the current modalities good enough?

5. The current gaps in treating the elderly

It is without a doubt that there are still gaps in our we treat patients with the current knowledge that we have be it therapeutically, cognitively, psychologically, etc hence these feed into the need for a few new modalities that fill in the gaps and, provide treating physicians with better option and hopefully better outcomes (43). However, the gap continues to widen when we handle the geriatric population with multiple comorbidities.

The current norm is to use data from evidence-based medicine to shape how we treat our geriatric patients, which creates several issues (44). Most trials while including a wide spectrum of patient age as part of their inclusion criteria, are not targeted, or designed specifically to deal with this segment. The complexities of drug-to-drug interactions are amplified in the elderly; hence safety signals will not move such trials forward (45). Most of the current scientific and empirical evidence from globally robust conducted trials fail to add value when it comes to better medical outcomes for these patients.

To put this into empirical perspective, Krzysztof Krysa *et al.*, looked at trials registered on ClinicalTrials.gov on geriatric patients recruited in cancer-related pain trials, with an emphasis on the selection criteria of patients (46). Suffice to note there the stark reality was the trials were designed in such a manner to exclude this segment of the population primarily due to the high-risk criteria exclusions that made it almost impossible to recruit such patients.

The primary focus of this article thus far, has been pain and suffering which are almost synonymous with the older populations, and to date, the most common medication used either over the counter or through prescriptions is oral analgesics. Here too we see how the evidence has not translated into finding the optimum treatment strategy for the elderly. In the RETHINK study, Japanese researchers have designed it to address the lack of comparative studies in managing chronic pain in elderly patients suffering from osteoarthritis.

tis of the hip and knee, which inadvertently affects QoL and disrupt activities of daily living (47). And when this occurs, the downward spiral towards loss of dignity, and self-assurance leads to poor outcomes. Again, this shows that lack of work for the elderly population.

Thus, we are unable to find the path to individualized treatment modalities as we cannot translate the data obtained into practical terms for treatment. We struggle with trying to understand the safety signals, how to manage adverse events, and navigating the possibility of geriatric patients already struggling with polypharmacy. This along, with the stereotyping among physicians, as alluded to previously, along with, at times, ambiguous guidelines, complicates matters and with the current scenario leads to a fatalistic look among the elderly person and their caregivers (48). This therefore gives fertile ground to looking at biological, physiological, and probably structural enhancements.

6. Transhumanism shaping the future for the elderly population

Transhumanism is still in its infancy especially when it comes to the elderly and its effects on longevity. However, in the World Economic Forum Insight Report August 2021, work has already begun on looking at possible avenues to enhance the quality of life for the older adult population (49). There are some guidelines set in place however the huge concern is that this could unravel a complex and complicated problem, that could undermine equality and justice for the older population.

While the monotheistic religions are very cautious and warn against humanity usurping the role of God, any biological modifications for the elderly for the want of longevity and a better aging process are viewed with great concern (50).

Discussions around longevity among the elderly, to age well with minimal or no suffering are not new. The *AVESTAGENOM*

*E project*TM investigated genome sequencing of the Parsi Zoroastrian community in areas of longevity and age-related diseases (51). The cultural uniqueness of this community of inter-marriages has resulted in those living longer as well as multiple disease profiles and therefore understanding the genomic footprint, through artificial intelligence technology opening new horizons in understanding ageing as well as offering steps to eradicating chronic and debilitating diseases.

Pushing the envelope further, a study done by Paolo Garagnani *et al.*, looked at 81 semi-supercentenarians and supercentenarians, as to the genome makeup of their longevity, focusing on cardiovascular disease and its scoring system (52). While I will not delve into their findings suffice it to say work is being done to understand if somehow, we could alter certain alleles, would impact longevity and potentially combat chronic disease.

Another arena that seems to be getting traction is the use of brain-computer interfaces among patients to overcome physical or cognitive impairments (53). While to date, no human geriatric trial has been done, advocates are putting forward the idea that these interfaces can be used in activities of daily to improve QoL and aid in terms of rehabilitation.

One cannot deny the speed at which Artificial Intelligence is driving the transhumanist agenda, and on that note, the three monotheistic religions came up with the ROME Call for AI Ethics in 2020, which had 3 impact areas and 6 guiding principles (54). While not specifically alluding to the elderly population, it set out areas where organizations, institutions, researchers, and other key stakeholders need to work on, what is called “algor-ethics”. Interesting to note it did not involve other mainstream religions, which would shape the future of the elderly population.

Buddhism, though, is compatible with the philosophy of transhumanism to reduce pain and suffering with available knowledge and emerging technologies if the goal is met (55). If this is the normative social and religious influence and going by the expected aging population to increase among the Buddhist and unaffiliated sphere, then biological modifications along with advancement in technology,

we would be facing an aging population that would delve into this area potentially unrestricted, if the “elixir of longevity” could be promised without pain or suffering.

Proponents of such ventures, posit that the rewards are phenomenal going beyond natural laws and allowing the human body to supposedly live to its “maximum potential” (56). Needless, to say, the detractors would argue that we are playing God and going into areas where we are not sure of the outcome, would it work and eventually cause more pain, when it first began?

Of course, the ethical and moral arguments would set this into a very divisive and controversial course of action; healthcare policies would have to radically change, and the effects would probably be seen in the developing world rather than the developed world, meaning where inequitable access would be an issue and escalating already delicate social concerns. Older people live longer and the subsequent generations grow older leading to a congested world running out of natural resources, on an already rapidly growing planet suffering from depleted resources (57).

Another concern, once transhumanism and its capabilities take root in the elderly seeking longevity will inadvertently cause an erosion of personhood and the tussle with respect and dignity (58). This would bring to the forefront the question of ageism and how we characterize it in the framework of making aging better.

Blay Whitby, an artificial intelligence expert at Sussex University, when interviewed in an article published in the Guardian in 2018, was quoted as saying:

History is littered with the evil consequences of one group of humans believing they are superior to another group of humans,” he said. “Unfortunately, in the case of enhanced humans, they will be genuinely superior. We need to think about the implications before it is too late (59).

Humanity is always wary of something new or foreign to an accepted norm, and presently we are at this stage with Artificial Intel-

ligence and what advocates of transhumanism can offer through augmentation of the human body (60). Another factor that adds to this 'brew' is the rapid pace in which these technological developments occur and with so much debate going on, one cannot be too sure if the stand someone takes today would not radically change in the coming weeks!

7. Discussion

The premise of this article is based on the shift of the older population potentially unrestrained by religious or spiritual parameters, to explore newer technologies such as biological enhancements or modifications to alleviate pain or suffering (37). These modalities would replace traditional medical interventions and open new scopes of practicing medicine. This also delves into the social aspect and its ramifications of how potentially parallel elderly populations would create inequality in terms of access resulting in the erosion of personhood and human dignity. With a clear geographical dichotomy between the first-world countries and the third-world countries, we would see a great disparity between the aging population and the younger segments, in every stratum of life (61).

The aging process and its impact are multidimensional and complex (62). Loss of physiological and structural integrity, with a gradual decline in homeostasis and the inability to respond to the ever-changing stimuli in the surroundings, will ultimately lead to disease and eventual death. Traditionally these views have always been something that must and should happen, however, considering how technology is evolving may soon be obsolete and arcane. One would dare say that Artificial Intelligence and the credo of transhumanism, are inexplicably joined at the umbilicus and advances herald new opportunities and may eventually change the face of gerontology and how we present options to the elderly in improving their Quality of Life and alleviating suffering and pain due to some skeletal or biological problem (63).

Religious bodies may need to reassess their understanding if advancements in technology prolong life, making the elderly beyond natural laws with no or very minimal defects, so to speak (64). Would this change the core message of the monotheistic religions, in that earthly life is temporary as we stay focused on life after death? Buddhism was chosen as one that shapely contrasts with the goals of the monotheistic religions because of the impact, it would have on the elderly population in the years to come (65). Whilst one would argue that Hinduism is open to the philosophy of transhumanism, it was not included in this paper primarily due to its representation in the elderly population by 2050.

This disconnect between religion and the elderly is not too far down the road if we were to look at a poll conducted by the Institute for Healthcare Policy and Innovation, University of Michigan, it was the National Poll on Healthy Aging. Several adults polled between the ages of 50-80, did not feel that their religious beliefs played a role in their healthcare decisions (66).

Presently, there is no consensus, on how any enhancements, if any, can benefit the elderly person in the long run (67). One would wonder about the ethical and safety issues that would abound when such human trials are to be conducted. This is something to explore in days to come.

8. Conclusion

As mentioned earlier, man fears the unknown and right now we are at a threshold of science evolving at such a rapid pace that somehow ill equips how medical information is delivered. How traditional advice is given to the older person going through pain and suffering, be it with pharmacological treatment, cognitive therapy and, or just interaction with a counsellor, would change to offering biological enhancements, cybernetics, implants as alternatives, would that make life better, is a question that remains to be answered.

Faith with a belief in God, still sustains and motivates the elderly and if the trend postulated in 2050 becomes a reality this would shift the dynamics of enhancements in whatever shape or form becoming common. We cannot ‘bury our heads in the sand’ and denounce the benefits of what the ideology of transhumanism can offer, but one must posit that ‘the line has to be drawn’ if we begin to play God and change the face of aging and humanity. Humanity must be at the centre and there must be an ethical approach to what this ideology can offer, ensuring equality, justice, and responsibility and devoid of pursuing one’s self-interest.

Finally, are the advocates of longevity and eradicating pain and suffering through technology, leading the elderly person down a slippery slope into an abyss where there is no return, this is a question that will be answered in time to come.

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