Intergenerational fairness: lessons from pandemic contexts

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Abstract
The present paper, focusing on the concept of intergenerational fairness, analyzes the obligation to ensure fairness to the young and future generations who experience serious deprivations from pandemics and similar hazards, and evaluates legitimacy of their claims. The paper examines the problem of shortsightedness of the dominant population which undermines the rights and interests of the future generations, and elucidates long-term impacts of our actions on humanity at large. The idea of intergenerational fairness is validated by the humanistic normative framework which is moored on rationality and virtuous disposition of persons. Among other things, the discussion evaluates the significance of the idea of fairness in using and preserving natural resources for future generations, grounds for prioritizing interests of the young while allocating healthcare resources, the obligation of the present population to ensure subsequent generations a decent minimum level of living, and the necessity to incorporate intergenerational concerns while formulating public policies. It is argued that pandemics and similar hazards remind us of our obligation to do reasonable, and morally justifiable, sacrifices for the young and future generations.

Keywords Intergenerational fairness · Future generations · Prioritizing · Humanism · Pandemics

Introduction
Discourses on pandemic management introduce several normative issues that claim urgent attention. In addition to considering justifiable claims of the dominant population existing at present, normative deliberations of pandemic management must pay adequate attention to the problem of unfair treatment of legitimate interests of the young population and future generations. The concerns of the young and future
population would appear justifiable, for they suffer seriously not only from the pandemic but also from various deprivations that are corollary to it (Naz and Joseph 2020; Guru 2020). For instance, Covid-19 has imposed additional burden on the young and the likelihood of them becoming unemployed is three times higher than that of older population (International Labor Organization 2020). The crisis is more acute to the unprotected workers in the informal economy (United Nations Economic and Social Council 2020) and those who are in the early stages of career. Since the quality of life of the young generation is significantly compromised by unforeseen constraints imposed by pandemics, and the life of future populations might seriously be disturbed by manifold uncertainties (UNICEF 2021), the society has a grave obligation to ensure fair treatment of possible interests of these groups. The tasks such as identifying, assessing, and justifying possible interests of future populations may be regarded to be performed by the normative frameworks of dominant theories of justice. However, the overlapping generation of the young manifests a hard area which transgresses the normative rubrics of any specific theory of fairness. This is because, the young constitutes a fairly large share of the existing population though the group does not claim a dominant role in formulating and implementing resource distribution policies. Nevertheless, the global scenario of deprivations imposed by pandemics such as Covid-19 vindicates an unfair distribution of harms to children, youth, and even to future populations (Passavanti et al. 2021; International Labor Organization 2020), and this disparity seems to be a compelling reason for considering their interests seriously.

We have explored the availability of an appropriate and convincing theoretical framework that helps identifying the normative foundations of our obligations to successors. Owing to the contentious nature of dominant theories of fairness and the uniqueness of the problems introduced by pandemic situations, we found it promising to adopt the normative framework of humanistic approach which proposes three major considerations in verifying prospects of fairness. This triad includes rational adjudication, the sense of common humanity, and virtues that are specific to the human nature (Steelwater 2012). We believe that the above framework is a promising candidate in the task of identifying normative underpinnings of the right to fair treatment and assessing the issues involved.

The first part of the discussion establishes the central thread, the idea of intergenerational fairness in the humanistic point of view, and defends the suitability of the approach. The discussion evaluates the two positions that are predominantly adopted in normative deliberations on intergenerational fairness and identifies the normative vacuum intrinsic to both the frameworks. While the utilitarian position is tendentious to be overly demanding, the contractualist approach largely depends on the presumption of a hypothetical reciprocity which is exceedingly ambiguous. As an alternative, the humanistic approach is proposed. It is believed that this approach is better efficient, because of its inclusive stance and attention to humane disposition, to resolve the deadlock.

The subsequent discussion, focusing on pandemic contexts, analyzes the urgency of ensuring fairness to the young in four major domains. The first involves the idea of fairness in using and preserving natural resources. We have argued that the problem of shortsightedness which is endemic to human nature generates overall suffering
in the long run, and it is reasonable to impose justifiable constraints on ourselves. Secondly, we have examined the idea of fairness in allocating healthcare resources and various nuances associated with prioritizing beneficiaries. It is true that pandemics impose agonies on everyone. However, the young populations should face additional physical burdens such as high possibility of unemployment (International Labor Organization 2020), disruptions in socioeconomic systems (Guru 2020) and health hazards from the disease (Naz and Joseph 2020). Likewise, they may face higher psychological traumas such as higher stress, anxiety and depression (Passavanti et al 2021), and deprivation of an environment which is conducive to a healthy psychological development (United Nations 2008) because things will no longer be same as before. We have paid attention to evaluate the debates on priority allocation of the limited healthcare resources during situations of high demand, and the agony involved in such choices. We believe, however, that a preferential treatment of the young turns out to be justifiable when every relevant factor of the judgment is equally applied to different age groups (Kuhse and Singer 2005). Furthermore, the discussion incorporates the necessity of reexamining the prevailing policies on property rights on healthcare devices in the light of global welfare.

The third part of the discussion focuses on fairness in assuring a decent minimum level of living across generations and the fourth part elucidates the idea of collective engagement which is essential to fair and successful policies. Furthermore, the discussion recommends more inclusive and foresighted policies that are capable to safeguard legitimate interests of each section of the present population and similar interests of future populations as well. Thus, the paper argues that the challenges of pandemic situations are to be addressed from a fully informed, normatively justifiable, and farsighted position which maintains the virtue of fairness and the sense of common humanity.

**Intergenerational fairness in the humanistic view**

Pandemics impose multifaceted distress to the global population at large and the young in particular. In addition to the agonies of infection and loss of lives, the world suffers from economic downfall, social disturbances, unemployment, poverty, hunger, and above all from the trauma of glooming uncertainty. The problem of uncertainty surmounts not only the possibility of therapeutic solutions to the ailment, but also the chances of regaining the stability of social systems that are seriously disturbed, the prospect of recovering from financial and material damages, and the future of the young population and generations to come. Recent studies vindicate an ever increasing rate of ‘stress, anxiety and depression’ among the young generation which is under the yoke of the pandemic (Passavanti et al. 2021). Paying attention to the distress which is imposed on the young during the defensive stages of pandemics and the likelihood of the long-term impacts of the attack, we argue that pandemic situations point to our obligation to the young and the population which might exist in the future. Furthermore, the hard lessons that we learn from pandemic contexts might help us shaping a better future for ourselves.
The idea of intergenerational fairness has attracted great attention in contemporary discussions on sustainable future that responds to the hard question that how much sacrifice we should be willing to do to safeguard and promote the quality of life of future generations (Heath 2013). The present day world does not subscribe to the Gaia theory which asserts the intrinsic ability of the natural environment to stabilize itself by replenishing the resources (Lovelock 1979). Rather, it is widely conceived that the natural environment is finite and passive, and therefore, continued availability of resources demand restraints on human activities (Elliot 2002). Anticipating an impoverished future, the Brundtland Report recommends pursuing developmental activities that ‘meet the needs of the present without compromising the ability of future generations to meet their needs’ (World Commission on Environment and Development 1987). Developmental activities have the potential to cause irreversible environmental damages (ibid), and unrestrained exploitation leads to the permanent depletion of natural capital. As a result, the future generations will be worse off than us. The hazardous condition of the extremely poor air quality in fast developing cities points to the possibility of depriving healthy air to the future populations (Bao and Zhang 2020; Dasgupta and Srikanth 2020). Likewise, 2.3 billion among the present population live in water-stressed regions, of which 733 million are in critical stress (UN Water 2021), and the number may increase to 4.8–5.7 billion by 2050 (ibid). Since unrestrained consumption and development activities might push future generations into a worse off condition, the concept of intergenerational fairness attracts urgent attention.

In the broader matrix of intergenerational fairness, we have paid specific attention to the legitimate claims of young and future people. Here, we would prefer to adopt the view of the United Nations, which for statistical purposes, defines ‘youth’, as those persons between the ages of 15 and 24 years, without prejudice to other definitions by member states (United Nations 2021). It is possible that the definition of youth might change with dissimilar circumstances that manifest social, demographic, economic and cultural differences. However, it is expected that the consideration of 15–24 age cohort as youth would fairly serve its statistical purposes for assessing various needs of young populations and identifying priority areas of their development. Given that the above consideration demarcates the youth population between 15 and 24 years of age, those who are below 14 years of age belong to the group of children (ibid). However, the convention of the rights of the child considers individuals ‘below the age of 18 years’ (United Nations Human Rights 1990) to be children. This is because several countries make a correlation between youth hood and the rights specific to an adult individual, and citizens above the age of 18 are counted as adults.

We find it difficult to propose an unchallenged definition to the concept of generation. In the strict sense, each birth or origin represents a generation and this idea draws support from the etymological consideration of the Latin root generare which signifies “to beget” or “to generate”. In the broader sense, however, the concept of generation might signify a group of entities that possess specific individuating attributes in common. The widely accepted concept of generation of human beings is based on insights from biological sciences that demarcate generations on the basis of the period required to reach adulthood and start begetting progeny, for it is
reproduction that regulates the whole generative process (Enger et al. 2005). Though it is possible to establish, in the light of biological considerations, an approximate age of adulthood, the possibility of manifesting the begetting and parenting capabilities would still be dissimilar across the globe. Therefore, a clear demarcation of generations would appear difficult even in the light of biological considerations. Furthermore, social theorists would prefer a broader interpretation of the concept with reference to socio-historical context (Pilcher 1994) which surpasses the biological framework. Accordingly, the term generation is conceived to be a cohort, a specific group of population that ‘experiences the same significant event within a given period of time’ (ibid), and the commonality of socio-historical experiences acts as the major basis for identity.

However, there appears the problem of *overlaps* of multiple groups that share certain roles and experiences at the same time while retaining certain differences as well. Likewise, there exist diverse sub groups within the same generations (ibid) and this phenomenon compels us to abandon the belief that the generational identity is sacrosanct. Possibly we can say that each group may have a dominant ‘historical consciousness that leads to experience and approach the same social and cultural phenomena differently’ (ibid). Even in the light of the historical context, the idea of generations is not problem-free, because cohorts may be clearer at the center but blurry at the boundaries (Rosow 1978), for it is possible that the borderlines may be shared by different cohorts. We believe that social existence is molded by the alchemy of biological dictates and social processes. Likewise, it is possible that people may largely be influenced by the socio-historical context that predominated in their youth (Pilcher 1994). Owing to the non-availability of a perfectly homogenized account of identity, however, we would find it appropriate to use the term *generations* in the plural sense of the term.

The two dominant normative positions that take lead in the discussion of intergenerational fairness are utilitarianism and contractualism. The first, utilitarianism, maintains a deep commitment to promote the potential rights of future generations over the rights of the limited population existing at present (Heath 2013). This is because the utilitarian position advocates promoting utility or overall welfare to the maximum population though it causes some inconveniences to a few. Therefore, a rigid interpretation of this position might appear overly demanding, for it imposes serious constraints on the present population which is duty bound to sacrifice its day-to-day needs and preserve everything possible for the use of the future generations that outnumber presently existing populations (ibid). Therefore, the utilitarian suggestion looks less convincing.

The second candidate, i.e. contractualism, looks maintaining the opposite stance at first glance, for it is possible to argue that no contract is conceivable between non-contemporaries, and the *nonreciprocity problem* nullifies obligations to future generations (ibid). However, a generous interpretation of contractualism would admit hypothetical contracts and indirect reciprocity that validate obligations among generations. Since we have received benefits from people who lived earlier, with whom we had no contracts and to whom we can never pay back, we have a similar obligation to people who are not yet born. Furthermore, there are difficulties in segregating generations perfectly, because there is the problem of *overlapping generations*.
that claim membership in more than one generation (Rosow 1978). For instance, infants and elderly population might not appear to be active players in revenue generation at present; however, the elderly were active contributors in the immediate past and children will become players in the immediate future. Given the fact that the presently existing adult population belonged to the young group of the immediate past and they will become members of elderly population of the near future, the additional burden expected from adult members is morally justifiable. Accordingly, the presence of overlapping generations would offer significant support to the indirect reciprocity thesis of contractualism. However, the critics would find the indirect reciprocity thesis ambiguous and vague because it is unclear to which degree and to what extent indirect relations can claim reciprocal obligations. Besides, the indirect reciprocity thesis would undermine the basic assumption of contractualism that obligations are determined by the terms and conditions of the reciprocal agreement among free and competent parties.

Taking the limitations of the above two dominant positions into account, we attempt to propose the humanistic normative framework which is anchored on the triad which involves reason, the sense of common humanity, and virtues specific to human persons. Though the humanistic framework cannot claim the theoretical status and rigor proper to other major theories of ethics, it appears to be a promising candidate to adjudicate practical issues that the present day world introduces. Unlike traditional normative theories that are rule based and insensitive to the context specificity of the problems to be assessed, the humanistic approach pays attention to rational validity of arguments. Therefore, in the humanistic framework, ethical deliberations will no longer be confined to meeting dogmatic standards of theories. The focus on reason makes the framework more convincing to the present society which promotes scientific temper and turns to science to enrich and complement normative deliberations. Furthermore, it maintains harmony with major theories of ethics. For instance, the humanistic framework accommodates the Aristotelian concept of practical rationality which should govern human action in specific situations (Aristotle 1893), the deontological proposal of the rule of reason which transforms our maxims universally applicable (Kant 2002), and the idea of deliberative rationality suggested by Rawls (1971) and other contractualists. The second in the triad, sense of common humanity, would help us expanding our idea of moral community beyond the limits of presently existing population and even beyond the domain of human community, and this certainly satisfies the utility maximization requirement dictated by the utilitarian position. Finally, the emphasis attached to humane virtues such as care, compassion, fairness, prudence, generosity, and fraternity makes it compatible to the virtue ethical framework and major cultural traditions.

We argue that the humanistic approach can fairly explain the normative significance of intergenerational fairness and reasonably respond to major dilemmas and puzzles that are introduced by debates on intergenerational obligations. For instance, the humanistic position would offer a better convincing explanation to the farmer’s dilemma presented by Hume (2003). According to Hume, a sense of fairness motivates farmers to cooperate in farming and to refrain from deceptive behavior, for the cooperation enhances wellbeing of everyone. On the contrary, any deceptive act from one of them might harm the cooperation and bring loss for all. The justification
for mutual cooperation, in Hume’s view, is to locate the specific instance of cooperation in the chain of larger sequence of cooperation in which subsequent cooperations are determined by the honesty shown in cooperating previous instances (Heath 2013). Furthermore, the consideration of a larger sequence of cooperation nurtures a sense of fairness which is no more dependent on external incentives. Complementing to this view, the humanistic position would add that the sense of fairness develops primarily because of the rationality perceived in the long-term interactions of cooperation, and secondly because of virtuous disposition of both farmers, for it is possible that an egoist farmer may refrain from cooperating with the other and find himself satisfied with his own limited yield. Accordingly, both the perceived rationality and humane virtues motivate people to trust in the strength of the long chain of cooperation.

The sense of fairness which is rationally established in the farmer’s dilemma is moored on perceived mutual benefits. The auditorium dilemma introduced by Parfit (1984), however, suggests the possibility of bindingness of the idea of intergenerational fairness even in the absence of any mutual benefit. People who sit in the first row of the auditorium may have a better visibility of the show if they stand up. However, it will harm the visibility of people sitting behind and therefore they may be compelled to stand up. Though they may not have any better view of the stage, because people in the front row are standing, they could possibly regain the initial level of visibility of the show. All viewers of the subsequent rows will have a similar experience if people who sit in front of them start standing up. Here, the wish of people of the front row to have a better view puts everyone else in the auditorium into trouble and those who are compelled to stand up behind them may not be morally responsible for their act of harming people behind them.

Though the possibility of a clearer view for the people in the first row gives some justification for their behavior, Gauthier’s case of keeping the river clean finds no identifiable justification for people living at the upper side to pollute the river or refrain from it (Gauthier 1986). It is beneficial to all if people living at the upper side do not pollute the river. However, no one is able to engage in mutually rewarding cooperation (Heath 2013). Therefore, the justifications for a fair behavior are to be explored beyond the rubrics of mutual benefits and interactions. Humanistic response to both the cases would focus on the possibility of identifying the motives for a fair behavior in relation to virtues such as the sense of common humanity and compassion, and the faculty of reason that binds everyone.

Unavailability of fully convincing justifications from the dominant normative theories is not a sufficient reason for not considering the interests of future people in our normative deliberations. Likewise, neither the seemingly convincing nature of interests of the dominant population nor temporal parameters that justify discounting unknown interests of future generations are the only parameters in moral considerations. Whereas, the humanistic approach appears to be a potential candidate in identifying foundations of intergenerational obligations with the triad of normative tools such as reason, the sense of common humanity, and the virtues intrinsic to human nature. Accordingly, it is possible to establish our duty to ensure fairness to the young and future people, especially when the quality of their life is seriously compromised and the right to a sustainable future is in danger. In the following
section, focusing on pandemic contexts, we analyze the urgency of ensuring fairness in using and preserving natural resources, allocating healthcare resources, guaranteeing employment and decent minimum of living, and adopting and implementing policies that manifest the virtue of foresight.

**Fairness in using and preserving natural resources**

Ever since the emergence of the present pandemic the world has witnessed to tremendous improvement in the quality of natural environment which involves healthier air, less polluted rivers and water bodies, and cleaner cities and townships. Air quality studies being performed throughout the globe reveal significantly lower levels of pollutants such as carbon dioxide, nitrogen dioxide, sulfur dioxide, and carbon monoxide, and drastically diminishing phenomenon of smog in highly polluted cities (Davenport 2020; Guttikunda 2020). Significant improvement in the quality of air was noticed in many cities in Europe, Brazil, China, and India during lockdowns and similar measures adopted during Covid-19 pandemic (Dasgupta and Srikanth 2020). The report issued by the Central Pollution Control Board of India, comparing the stages prior to the pandemic and during it, illustrates significant improvement in air quality in 70 cities of the country which hosts the worst polluted cities in the world. Overall, 46% reduction in PM2.5 and 50% reduction in PM10 were observed during the pandemic period (Central Pollution Control Board 2020). Similarly, the study conducted in 44 cities in China finds remarkable reduction in atmospheric pollutants. SO2 was found decreased by 6.76%, PM2.5 by 5.93%, PM10 by 13.66%, NO2 by 24.67%, and CO by 4.58% (Bao and Zhang 2020).

Such improvements would look so significant to the world which has been suffering for the past two decades from extremely hazardous level of atmospheric pollution. The study which ‘estimates deaths and disability-adjusted-life-years (DALYs) attribute to air pollution’ suggests that 1.24 million deaths in India in the year 2017 must be from air pollution (Balakrishnan et al. 2019). Similarly, highly polluted rivers such as the Ganga resumed carrying clean water which is fit for drinking. The studies substantiate a significant reduction of turbidity (Garg et al. 2020), which is largely anthropogenic. A similar improvement is visible in cleanliness and sanitation of cities and townships across the globe (World Health Organization 2020a).

The improvement in the quality of environment during Covid-19 context impels us to consider the idea of intergenerational fairness in using natural resources. The widely accepted concept of sustainable development underlines our obligations towards future generations while using natural resources for the present needs and developmental activities. The significant amelioration of the global ecosystem substantiates the great potential of restraints that humanity can impose on itself without incurring heavy costs. Furthermore, it compels us to feel remorse for the shortsightedness of our developmental activities, and this sense of remorse is well justified since we have imposed serious damages to the richness of flora and fauna, significant threats to the presence of natural habitats that home to millions of species, and created an ontology which frequently introduces monstrous riddles. Having denied of the right to live in a safe environment, the young generation of our time and the
generations to come will never be able to absolve our mistake, ‘the folly which will never be forgiven’ (Wilson 1984).

Two major reasons, according to evolutionary theorists, for our shortsightedness in developmental activities and the tendency to discount irreparable damages to nature are our fundamental disposition to consume and the inclination to think in physiological time (Penn 2003). The first, i.e., the disposition to consume, is neither directly correlated with our need to survive nor with the likelihood of prosperity. Situations similar to Covid-19 pandemics have proven that humanity can lead a reasonably good life in the absence of advanced living conditions, modes of fast and costly transportation, and high end gadgets. Furthermore, our idea of prosperity is often moored on relative considerations rather than objective and rational foundations (ibid), and therefore diverse societies across the world compete among themselves to become the most aggressive consumer, desperately looking for everything which is being consumed by others. Additionally, the absence of availability of goods that others consume generates a sense of deprivation which always haunts human mind. The second one, thinking in physiological time, unveils the hedonistic side of human nature. It is engraved in human nature to be attracted to immediate gains over long-term welfare and to small pleasures that are proximate over overall flourishing in the remote future (ibid). These dispositional constraints of human nature invoke unforeseen sufferings similar to the one which haunts mankind today.

Among other things, the pandemic presents a big lesson, i.e., to look for a better sustainable way of development that ensures fairness in using and preserving natural resources in such a way that the young and future generations are not deprived of their right to have a healthy environment to live in. Here, the humanistic normative framework we have proposed would recommend applying the faculty of reasoning that helps us learning from mistakes committed in the past and turning to human values such as prudence and temperance that nurture a virtuous disposition. This disposition makes one performing one’s function well and aiming at the mean or moderate amount (Aristotle 1893). Stated otherwise, humanity must adopt the disposition to enhance overall happiness by imposing certain constraints that are unavoidable. The idea of constrained maximization proposed by Gauthier (1986) represents this view. It is likely that the disposition to impose certain constraints on ourselves for greater welfare of humanity will establish a sense of justice across generations.

Fairness in allocating healthcare resources

Another major crisis corollary to pandemics is the explosive demand for healthcare resources. As recorded in the Covid-19 dashboard of the World Health Organization, there were 214,468,601 confirmed cases of the disease across the globe on 27 August 2021 and 4,470,969 deaths were reported and 4,953,887,422 doses of vaccines have been administered (World Health Organization 2021). The figures expose the magnitude of the impact of COVID-19 on the global population and the heaviness of the burden imposed on healthcare services. Leaving aside the debates over the pandemic management strategies adopted by different nations and various
ethical issues on data harvesting, drug development, and clinical trials, we would like to focus on the problem of priority allocation when healthcare resources are desperately scarce. Though the data substantiate significant fall, over the first one year, in the number of deaths recorded, no substantial reduction in the number of new cases reported per day is found. While 655,085 new cases were reported on 27 August 2021 (ibid) a proximate figure was found during the same period of the previous year. The data unveil the alarming status of the crisis and the possibility of more challenging situations that are not yet anticipated. Several societies, therefore, found it unavoidable to adopt a tentative framework in prioritizing distribution of limited healthcare resources during both preventive and remedial stages. When the resources are limited and priority allocation becomes unavoidable, it is possible to find it justifiable to prioritize the need of the young generation for several reasons.

The global community has acknowledged medical care as a human right (United Nations 1948). Additionally, states are regarded to be responsible to prevent, treat, and control pandemics (United Nations 1976), and children and adolescents are counted as vulnerable groups which need special consideration because of their stages of physical and psychological development (United Nations 2008). Apart from the possibility of death and various afflictions from Covid-19 infection, more than 50 long-term serious health complications are reported (Lopez-Leon et al. 2021) and we are not yet sure of the possible duration and outcomes of these complications. Major health complications include lung fibrosis, extreme weakness, breathlessness, hair loss, sleeplessness, attention disorder, and joints and muscle pain (Shankar 2021). The possibility of long-term impacts of Covid-19 point to the challenges in shaping a healthy future population. In addition to the harms caused by the non-availability of healthcare facilities that are supportive to physical well-being, the young generation is afflicted by the prolonged deprivations to their psychological wellbeing from the unavoidable pandemic management strategies such as social distancing and isolation. Additionally, it is found that the long-term impacts of Covid-19 include memory loss, anxiety and depression (Lopez-Leon et al. 2021). The young generation is denied of the lessons from social experiences, the matura- tion experience from intricacies of interpersonal relationships, and colors and joy that the social life adds to their life. Therefore, it becomes a grave responsibility of the social machinery and the dominant population to give priority to the needs of the young and thereby minimize impacts of the sacrifices they have been making. This, however, depends of the capabilities of each society and the intensity of the impact of the pandemic.

Contemporary discussions on fairness in resource allocation frequently invoke the idea of parity between burdens involved in specific acts and benefits received by agents. Accordingly, any allocation is perceived to be fair when the burdens are compensated adequately (Beauchamp and Childress 2013). Moreover, it would appear to be fair if the subject who takes the larger share of burden receives a higher share of benefits which compensates the sufferings involved. It is reasonable to argue that the young generation across the globe has been sharing a significantly larger amount of burden, both direct and indirect, during COVID-19 pandemic. Successful models of pandemic management and containment are heavily relying on their young members who navigate the task forces from bottom to the top. Dashboards
of these models substantiate unparalleled engagement of the youth population, the majority belonging to the age range of 20 to 30 years, in the collective resistance against the pandemic (Naz and Joseph 2020). Furthermore, the young had to take indirect burdens, such as loss of job, reduced salary, and deprivation of social life and friendship, when pandemics paralyzed social structures. This compels the world to start thinking about the burdens that are disproportionately allocated to the young and to explore alleviatory measures. It might look reasonable, from the humanistic perspective, to argue that the young who are healthy and strong have a higher obligation to the society and therefore they have an additional responsibility to take an extra share of the burden. However, this comparably higher capability of health shall not be a valid ground to discount their present sacrifices and uncertainties hovering over their future.

Pandemic situations introduce serious dilemmas in prioritizing the allocation of limited healthcare resources. Bioethical discussions have paid some attention, largely from a theoretical point of view, to the problem of prioritization; however, pandemic contexts necessitate more serious attention to this issue because of the magnitude of the crisis. In contemporary discourses on the topic, a dominant view that aims at ensuring fairness in healthcare allocation is the Quality Adjusted Life Years (QALY) position that focuses on Cost Effectiveness Analysis (CEA), which is further based on Cost Utility Analysis (CUA) (Beauchamp and Childress 2013). As implied by the title, expected health gains and expenditure of resources are the two concerns of this position (ibid). Most of the major theories of fairness do have objections to the QALY framework because of the possibility of discriminations on the basis of age. Nevertheless, the theories collectively admit that such a consideration would look fair in extreme situations of pandemics that claim a huge amount of resources. Furthermore several societies have already implemented age-based prioritization of healthcare services that restricts resources to the population which, according to the society, retain a lower quality of life (Wing 1983). Similarly, the right to healthcare is largely interpreted as the right to basic minimum of care (Callahan 1989). Furthermore, the idea of prioritization would look feasible to healthcare systems that are completely managed by the state, whereas most of the liberal societies accommodate a pluralist healthcare framework which helps utilizing resources beyond the QALY parameters.

Priority setting of healthcare services, if unavoidable, must be justified by fair procedures that are followed. Affirming this requirement, Nicholas Rescher, and Beauchamp and Childress present five factors that legitimize the decision-making. The first is consistency and impartiality in priority adjudication, the second is the respect for advanced scientific accounts that help an informed assessment, the third involves prospect of success of the choice made, and the final two are medical efficiency and social utility (Rescher 1969; Beauchamp and Childress 2013). A further analysis of the above factors reveals that the young do have legitimate reasons to claim priority when every other relevant determinant, such as interests, sufferings, and threats to life, is undoubtedly similar to those of the elderly population. Any impartial and scientifically validated deliberation would favor the young since the prospect of efficacy, medical efficiency, and social utility are found significantly higher among the young population than the elderly group. Furthermore, a positive
interpretation of the QALY position and fair innings argument would look convincing to us since the criterion adopted is unavoidable and rational, and the intention is morally defensible and optimistic. Owing to these reasons, it is possible to argue that it is fair to favor the young ‘when everything is equal, and the length of life is at stake’ (Kuhse and Singer 2005).

However, we do not recommend an arbitrary act of priority setting focusing on age alone, for it takes us to a slippery slope position similar to the shoot-the-pensioners paradox. The paradox reveals the fallacious assumption that pensioners, who contribute no more to the material wellbeing of the society, can be eliminated. Rather, we would turn to the concept of deliberative rationality, suggested by Rawls (1971), which pays attention to the counting principles of rational choice that ‘maximizes the expected net balance of satisfaction’ (ibid). The three essential conditions of deliberative rationality, as Rawls suggests, are the assurance that there are no errors in reasoning, the decision-making system is competent, and adequate attention is given to the circumstantial and temporal limits of the specific decision. Therefore, the idea of good as rationality would help promoting overall welfare, manifesting the virtue of fairness. Singer (2005) believes that collective willingness to prioritize the promising group, the young, shapes the society more humane and compassionate, and furthermore, ‘tilting the balance of healthcare towards the more disadvantaged members of the society will reinforce feelings of concern and sympathy’ (ibid). When the potential life years or the remaining innings are calculated, and the deprivations that are present today and anticipated in the future are considered, the young appears to be the disadvantaged group. Reiterating this view, Singer (ibid) argues that it is perfectly reasonable to prioritize ‘those who could become much better’ than those ‘who could become little better’.

In the real life scenario, however, priority allocation is one of the most painful tasks that might be imposed on healthcare professionals, and indeed it is extremely hard when the number of the needy population is so large and only a few are chosen, leaving the rest to death. It may even be argued that average life expectancy has increased over time and, thanks to recent advancement in medical sciences, young generations may live longer and healthier. However, the huge amount of uncertainty which surmounts pandemic scenarios compels us to think differently. The perplexity of the problem may be minimized if the society perceives fairness in terms of deliberative rationality and humanistic virtues. Heroic acts of sacrifices performed during Covid-19 pandemic substantiate the public perception of fairness in prioritizing healthcare resources to the promising cases. One of these heroic acts was reported on 15 March 2020 as Don Giuseppe Berardelli, a 72-year-old Italian priest sacrificed ventilator support to save the life of a young patient (Berardelli 2020). Similar to this case, on 20 March 2020, Suzanne Hoylaerts, a 90-year-old Belgian woman, embraced death leaving ventilators for younger patients (Chini 2020). These instances support the premise that priority setting may be perceived to be fair if the society is convinced of its rational justifications.

The dashboard of the World Health Organization (2021) reported that 4,953,887,422 dozes of Covid-19 vaccines have been administered till 27 August 2021 and a major share of the global population was still deprived of preventive dozes. Six months prior to this, almost 130 countries with 2.5 billion people were
waiting for the first dose (Kretchmer 2021) and we are not yet able to ensure adequate availability of vaccines for everyone. In the light of the directives of the World Health Organization priority was given in the stage 1, when vaccine was really scarce, to healthcare workers and elderly population. Subsequently older adults and people with comorbidities were given priority, and in the third stage when vaccine availability became moderate, essential workers and employment groups were administered vaccine (World Health Organization 2020b). In this sequence, young populations get lowest priority owing to which they are compelled to refrain from normal course of life. Returning to the normal life might make them risking their lives and spreading the pandemic. To ensure greater availability of vaccines to the entire population a few states have adopted the policy of a delayed second dose. However, vaccines are political and ‘vaccine nationalism’ and ‘vaccine diplomacy’ are catchwords of the pandemic times (Chatterjee et al. 2021). The situation prompts us to turn to our human sensibilities which would help us identifying the legitimate rights of the deprived populations that would surpass private interests and competitions.

Finally, the hard lessons from pandemics compel us to reexamine the prevailing policies of property rights over healthcare devices, technologies, and drugs, particularly when it becomes a global emergency. It might appear to be strange that the prevailing patent policy has never undergone any major change ever since its formulation which took place more than a quarter of a century. Here, reconsideration looks essential, because the present status of technological development, availability of markets, the volume of economic returns, and the level of human dependence on products are significantly dissimilar to the earlier global scenario that defended the validity of patents for 20 years, which is believed to be justifiable to meet the two major goals such as compensating the inventor and encouraging further inventions. However, one may wonder how much compensation is fair enough and how much encouragement is essential to motivate further inventions. Another concern is about the unethical practice of virtual patent extension by producing generic substitutes of healthcare devices and medicines before the expiry of patents (Kamien and Zang 1999). Both the brand loyalty of the users and the advantage of an early entry into generic medicine market facilitate continued monopoly of the patent holder.

Among various ethical issues raised against the prevailing practice of patenting, we believe, the two major problems are (1) the insensitivity towards social welfare, and (2) the heedlessness to the future generations. Amidst Covid-19 crisis, pharmaceutical companies were aggressively working to expand globally their patents on some of the previously patented molecules that are potential candidates for vaccine development, and were rather successful in this task irrespective of the pleas of advocacy groups to rescind the patents to help a fair distribution of vaccines (Gopakumar and Sivasubramanian 2020; Siddiqui 2020). Though it is possible for the governments to issue compulsory licenses for generic production of medicines in extreme situations of emergencies, bilateral agreements and political pressure make such measures difficult to be implemented. While the collective welfare is in threat, it appears imperative that the international community should revisit its position towards intellectual property rights. Considering the constraints of the present discussion, we do not attempt to analyze all the normative nuances of the patenting
policies; rather we argue that the shortsightedness of the policies might harm legitimate interests of the young and the generations to come. It is possible that future discussions on rectificatory justice might focus on unfair property right policies that are being implemented today, and furthermore, having the potential to turn out to be historical mistakes. Since there exists a positive correlation between the top affluent people in the world and the intellectual property rights they hold, it is reasonable to argue that the policies are to be reexamined in the light of collective welfare both of the present and future populations. Long-term monopoly over social utilities and the possibility of massive wealth accumulation by a few might lead to an unfair social structure which harms quality of life of the young, and it is a matter of great concern indeed.

**Fairness in ensuring decent minimum level of living**

Pandemics emerge as health crises, but in no time pandemics assume the status of economic crises. For instance, the claws of the pandemic Covid-19 embraced the economies of the countries across the globe, with an alarming growth of the sense of uncertainty, unanticipated hindrance in trade and investment, unexpected shutdown of factories and business firms, and serious disruption of the global value chain and supply (Guru 2020). The livelihood of people has been greatly impacted, and its intensity was higher in undeveloped and developing nations that home to the poorest and most vulnerable population who depend on the informal sector for their living. The population which is in the labor market has been facing a huge brunt of the pandemic through huge layoffs and wage cuts, leading to tremendous rise in unemployment, poverty, and hunger. The crisis has been more acute to the unprotected workers in the informal economy (United Nations Economic and Social Council 2020). Furthermore, low and middle income countries wherein the health services and social protections are limited, the informal sector workers are at the receiving end with the pandemic.

Almost 2.7 billion workers, representing around 81 per cent of the world’s workforce, has been impacted by the lockdown measures, both in terms of the number of jobs and aggregate hours of work (International Labor Organization 2020). The past economic crises such as the depressions in 1929 and 2008 had revealed the vulnerability of youth in the labor market. Covid-19 has imposed additional burdens on the young and the likelihood of them becoming unemployed is three times higher than that of older population (ibid). The global youth population has increased significantly, from 1 billion to 1.3 billion; however, there is a serious downfall in the number, from 568 to 497 million, of the employed youth. Structural barriers such as precarious working conditions, lack of legal and social protection, limited opportunities for training and career progress, and the problem of limited work experience while applying for entry level jobs, make the condition of the young more vulnerable (ibid). Though reasons such as longer duration and added possibilities of the present education system and other priorities would have contributed to the downfall in the number of unemployed youth, recent data substantiate the role of the pandemic in increasing youth unemployment rate substantially. While the fall in employment
during Covid-19 pandemic was 3.7% for others, youth population had to face a significantly higher rate of 8.7%, and the rate turned out to be 12.55% in the second quarter of 2020 (World Economic Forum 2021).

The data presented by international agencies will help us conceptualizing the intensity of the loss of employment during pandemic situations. However, we do not have any clear idea of a more disturbing problem, the denial of entry into the job market. Millions of young, who were about to start their career, did not move to employment but dropped out of labor force or delayed their entry during Covid-19 (International Labor Organization 2021). The actual figure of unemployed young would look more frightening if we consider the number of the denied population, “the all too real risk of a lost generation” (ibid). Another major concern is the implementation of a lower pay scale followed by lesser chances of regular increments and significant reduction in the labor income. It is observed that a decline of 8.3% of the previous year is found in the global labor income of the year 2020, and the decline was 12.3% among lower-middle income countries (ibid).

However, the progress of technology gives us the hope that new job opportunities may be available to the young generations. It is expected that jobs that require advanced skills may favor interests of the young population. However, technological advancement brings higher risks such as losing jobs owing to massive automation, less requirement of manpower when virtual platforms perform the same task better efficiently, and the likelihood of greater inequality among the young if relocation of labor markets is performed to promote interests of technologically advanced nations (International Labor Organization 2020).

Available reports of financial depression and unemployment are limited to the organized sector alone, and we do not have a clear picture of the millions who work in the unorganized sector. Hardships of the migrant population, mostly the young, across the globe claims special attention in this regard. Paying attention to article 23 and 25 of the Universal Declaration of Human Rights, the society has the obligation to alleviate sufferings of the victims of pandemics and explore measures that promote social justice, and this requires a fair allocation of job opportunities and the availability of decent minimum level of living to everyone. Indeed, it is a challenging task to the global community. The immense potential of the young in regaining the lost welfare is a valid justification to protect their interests. Furthermore, the humanistic position which believes in the idea of common humanity and pays attention to humane virtues such as compassion would identify our obligation to promote the quality of life of the deprived population.

**Fairness in policy formulation and implementation**

A major share of the economic and social impacts of pandemics will be experienced by the young population and future generations. Therefore, policy formulations must pay sufficient attention to the legitimate interests of the young and future populations and design policies that cater to their needs categorically. However, in reality, policy deliberations and implementations attend to the interests of the dominant population and discount virtues such as fairness, representation, inclusiveness, and
transparency. However, several nations have attempted to respond to the needs and aspirations of the young by designing inclusive and comprehensive policy framework and maintaining a national youth policy. However, the possibility of implementing effective global policies for the young stills appears to be a distant dream. Factors such as the absence of monitoring and evaluation systems, the lack of financial resources, weak implementation machineries, and the unavailability of trustworthy data make it difficult to implement it globally (Organization for Economic Co-operation and Development 2017).

It is commonly believed that a good policy must manifest the virtue of sustainability. The idea of sustainability is not to be confined to the narrow frames of economic welfare; rather it must incorporate all the three aspects, such as social, economic, and environmental progress. However, our perception of welfare is primarily focused on economic flourishing and much of our policy deliberations are centered on market dynamics, greater consumption techniques, smarter life styles, and material affluence. Global challenges introduced by pandemics point to the inadequacy of prevailing policies that are incapable to ensure social and environmental progress. Indeed, the idea of sustainable development framework proposed by the global community mirrors the normative framework of humanistic position which we have adopted in the discussion.

The humanistic normative framework underlies not only in conceiving the idea of sustainable development, but also in identifying sustainable development goals. Furthermore, the framework propels the human security approach adopted in 1994 by the United Nations Development Program. Imbued with the spirit of humanistic normative position, the approach aims at people-centered, context-specific, comprehensive, and prevention-oriented responses that strengthen the protection and empowerment of all people (UN Trust Fund for Human Security 2020). Human security approach focuses on managing and minimizing risks and averting apparently insignificant challenges from mounting (Naz and Joseph 2020). On proactive and inclusive foundations, it helps societies solving problems of hunger, unemployment, injustice and stigmas, and restores communities for a better future.

Conclusion

We have analyzed the normative foundations of our obligation to ensure fairness to young populations that take extra burdens from manifold deprivations imposed by pandemics and other hazards, and attempted to justify our duty to establish a sense of fairness across generations. Adopting the humanistic normative framework, we have argued that neither the temporal proximity nor the capability to be a participant in decision-making process serves as a sufficient ground for ascribing the right to a fair treatment. Furthermore, the putative division of generations is problematic since there exists overlapping generations. The paper argues that the humanistic position appears to be a promising candidate equipped with a broader and inclusive framework that fills the normative vacuum left by dominant theories of fairness. It is observed that the sense of fairness that regulates our interactions with other members of humanity cannot be located in the narrow frames of utility and contracts. The
paper advocates a radical revision to our disposition that helps preserving natural resources for future generations, prioritizing the quality of life of the young population, alleviating sufferings of the young, and framing farsighted policies that are capable to safeguard legitimate interests of future populations.

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