

# Inequality and the future of healthcare

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## ABSTRACT

To protect our masses, primary care institutes were developed in many countries, all over the globe. In the previous era, labour was valuable to produce crops and protect native countries from enemies as no substitute for raw labour was available to do these jobs. The scenario has changed after the era of automation. After the agricultural revolution, technological revolution took place. Hence, most of the manual jobs in agriculture sector and industry sector were automated. As a result, “new” type of jobs has emerged which was based, so far, on mainly of cognitive skills, e.g., learning, analysing, communication, and understanding human emotions. As the technology is advancing day by day, the role of humans as individual is becoming less and less except for some extraordinary persons or elite groups. Now the important question is, will elites and governments will go on valuing every human being even when it pays no economic dividends? Will the development of mass medicine/primary care will continue? Will governments/bureaucrats fund adequately for the protection of the health of these useless classes merely on the humanitarian ground? We assume that due to technological advancement and greater role of elite classes, the norm of shifting non-normal people to normality may not require any more, the previous practice of treatment (health for all concept) may not repeat in future and it is quite natural. Experiences from Japan highlight that society may prefer these elites to the useless average class. The gap between the two classes regarding availing health facilities may widen further. This is because the government may focus more on the health of elites than common masses. One step further the government/bureaucrat may try for immortality/divinity for this elite class, at any cost for maintaining supremacy over the poor masses.

**Keywords:** Inequality, inequity, mass medicine, public health, primary care

## Changing Concept of Mass Medicine and Primary Care

In the last few decades, we have managed to survive in famine, plague, and war with the help of innovative technology.<sup>[1]</sup> To protect our masses, primary care institutes were developed in many countries, all over the globe.<sup>[2]</sup> In the previous era, labor was valuable to produce crops and protect native countries from

enemies as no substitute for raw labor was available to do these jobs. The scenario has changed after the era of automation.<sup>[3]</sup>

In the past, humans retained an authoritative role over the machines because of cognitive advantage and machines conquered with humans mainly in raw physical capabilities.<sup>[4,5]</sup> Still, we cannot ignore the vested interest of bureaucrats/governments. In other words, previously focusing on mass medicine/Primary care was important for the bureaucrats/governments, due to economic importance of common people, besides protecting human rights.<sup>[6]</sup>

After the agricultural revolution, technological revolution took place. Hence, most of the manual jobs in agriculture sector and industry sector were automated. As a result, “new” type of jobs

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has emerged which was based, so far, on mainly of cognitive skills, e.g. learning, analyzing, communication, and understanding human emotions. As the technology is advancing day by day the role of humans as individual is becoming less and less except for some extraordinary persons or elite groups.<sup>[7]</sup>

The group of intellectuals/elite people are required to control and maintain those machines/devices. Still now, the bureaucrats/governments need that elite class to perform their work by their extraordinary skills (programming robots, checking algorithm, etc.), i.e. helping decision making for the bureaucrats/governments. According to scientists, in the future, these small groups of elites will perform the most important decisions in the world. They will play a vital role in our society and fortunately or unfortunately, society/system may not understand them and cope/manage them properly.<sup>[8]</sup>

Most of the masses may not cope with the elites and become a useless class. It is quite possible in future that the useless class will be dominated by the elite/intellectuals/superhuman.<sup>[8]</sup>

### Threats to Mankind on Equity and Inequality Issues

From the above discussion, it is clear that the biggest 3 threats to mankind in the future due to advancement in technologies will be-

1. Loss of individuality - Human beings will lose their value completely as AI will replace humans in most of the sector
2. The collective human value may remain the same but the authoritative role of humans may not be in place
3. The group of small and privileged people will remain indispensable and undecipherable

Now the important question is, will elites and governments will go on valuing every human being even when it pays no economic dividends? Will the development of mass medicine/Primary care will continue? Will governments/bureaucrats fund adequately for the protection of the health of these useless classes merely on the humanitarian ground?

If not, then liberalism may be destroyed and it may coexist with social inequality since it favors liberty over social inequality.<sup>[8]</sup>

Due to social inequality, access for health services will be available more to the elite classes. Here also *Pareto's* principle<sup>[9]</sup> may be followed, which tells that 80% of the resources will be consumed by 20% of elite peoples. Rest 20% resources will be available for the unfortunate useless class. Even the scenario may become worsen; the governments may not bother for that useless class at all, regarding basic health care. For them, public/mass will become liability, then they will more concentrate on the wellbeing of elite people despite incurring higher costs. As the elite class will become indispensable for controlling the whole world.<sup>[8]</sup>

As an example, a Hollywood actress did genetic testing worth \$3000, which is not affordable for most of the people around

the globe due to high cost and unequal wealth distribution.<sup>[10]</sup> Nowadays the inequality is so high that, 62 billionaire people hold the total wealth, which is equal to the wealth of 7.2 billion people.<sup>[11]</sup>

### Primary Care to Precision Medicine: The 'U' Turn

Due to the advancement of health care technology, the cost of health care will increase day by day. Although the cost of the traditional old treatments will go down, the elite class will enjoy the advance treatments, which will further increase the gap of health care access for modern treatment.<sup>[8]</sup>

Some scientists opined that the scenario may not be the same, according to them in the 20<sup>th</sup> century many medical advancements were begun with the rich, but later it had benefitted the whole mankind. For examples newer vaccines and antibiotics first benefitted, the upper class later it did the same with the common people. Now, this time history may not repeat again, this is due to in the previous century, the medicine aimed to heal the sick but in 21<sup>st</sup> century medicine is aiming to upgrade the healthy.<sup>[8]</sup>

There is a drastic conceptual difference for treatment that is present between 20<sup>th</sup> century and 21<sup>st</sup> century, which is explained below.

In the 20<sup>th</sup> century, it was a norm that doctors will treat the sick and make them healthy, i.e. they will make non-normal person to the normal persons (be like everyone) so that equality prevails. Previously, doctors provided basic treatment to all the people (health for all concept) irrespective of social status, class, intelligence. As previously described, besides elite classes, the masses also had economic value for the government.<sup>[8]</sup>

However, in the 21<sup>st</sup> century due to technological advancement and greater role of elite classes the norm of shifting non-normal people to normality may not require any more, the previous practice of treatment (health for all concept) may not repeat in future and it is quite natural. As society will prefer these elites to the useless average class. The gap between the two classes regarding availing health facilities will widen further. This is because the government will focus more on the health of elites than common masses. One-step further the government/bureaucrat will try for immortality/divinity for this elite class, at any cost for maintaining supremacy over the poor masses.<sup>[8]</sup>

Due to technological advancement, two clear-cut pictures regarding health care services can be observed. In the future, the poor may enjoy superior health services than today, but the gap separating them from the rich will nevertheless be much greater.<sup>[7]</sup> As an example, for breast cancer detection, mammography and genetic testing are done these days. Genetic testing is much costlier than mammography. Although mammography is still not freely available for the common women due to high cost. But in near future due to technological advancement the cost of mammography may decrease and everyone can avail it freely,

meanwhile, the government may provide costlier yet free genetic testing for the elite class only. Therefore, the elite will enjoy better diagnostic facilities (as in this case, breast cancer screening) than common masses; hence, they can plan for better preventive measures like early mastectomy. Therefore, the access gap for poor and elite of diagnostics/treatment will remain unchanged.<sup>[7,8]</sup>

Despite medical breakthroughs, a reverse scenario can be observed. The poor may not enjoy better health care as state and the elites may lose interest in providing the poor with health care.

In the 20<sup>th</sup> century, medicine benefitted the masses because on that time labor was valuable for any country in the form of the army, labor, etc., The establishment and development of Primary care Sector were done due to production of many healthy humans, as state/country required them.<sup>[12]</sup>

As an example, in 1914, the elite class of Japan had vaccinated the poor, built the primary care system, developed proper health and hygiene measures for the poor mass as they have vested interest in it. In that time, Japan required healthy soldiers and workers for their development.<sup>[13]</sup>

In the 21<sup>st</sup> century, the age of useless masses and the use of mass medicine in the form of Primary care may be over.

Health is a fundamental right for everyone. Still, most of the country is bound to provide basic health facilities irrespective of class, caste, and religion.<sup>[12]</sup> But the elitist lobby may deny providing the minimum health services to the poor as they may think that it is not cost-effective for them and they may concentrate more on upgrading/increasing the longevity of the elitist groups, despite that this is unethical.

We can quote the example of Japan, where the birth rate is falling down, so more and more efforts are invested in upbringing and educating fewer children with higher expectations.<sup>[8,14]</sup> It means Japan is a technologically advanced country, now they are less bothered about average skilled/talented labor, they require elite class of citizens who can make complex algorithms, repair Robots, and make advanced drones for nuclear warfare.

It will be very interesting to observe in the future that how India, Brazil or Nigeria like countries having a higher population and limited resources will compete with Japan? As per our argument, the elite class says, skilled people of Japan, will be far ahead in technology (it is already ahead), health care, longevity, even in every aspect, from the densely populated country like India.

As an example, when we will expect about 100% vaccination coverage programmer in India, then Japan will think about making clones of their famous/elite people to maintain their supremacy.

It will be also interesting to see in the 21<sup>st</sup> century, whether the elitist lobby in the low- and middle-income group will give emphasis on mass medicine/Primary care? The policymakers will

have to make a tough choice between the two options-

1. Invest in fixing the problems of hundreds of millions of poor.
2. Upgrading a few million superhumans/elites.

In the 20<sup>th</sup> century, the elite had a requirement of labor (in army, agriculture, etc.) to maintain their economy, that is why they had focused on the mass medicine/primary care for the poor people.

Many primary care institutes were established (In India-All India Institute of Primary care). Now the requirement of the elite class is completely different, now it is the age of nuclear warfare, robot soldiers, drones, and artificial intelligence where few superhumans are required for doing the same job in a better way. Therefore, it is quite pertinent that role of mass medicine/primary care may be ignored, regenerative medicine/cloning will be welcomed, and future treatment policy may be changed completely. This is because it may be wastage of money for the government to provide mass medicine to all, as this useless class will not give any dividends like elite class. The common mass may not be able to fix the problem like repairing robots, making advanced drones or contributing to regenerative medicine to provide longevity to the people.

## Conclusion

The important projects of the 20<sup>th</sup> century for overcoming famine, plague, and war aimed to protect all persons equally due to universal norm. The new projects of the 21<sup>st</sup> century—gaining immortality, bliss, and divinity may surpass rather than safeguarding the norm and the creation of superhuman may take place. The useless class may be treated no more than African slaves.<sup>[8]</sup>

This division of two classes—elites and common mass—may cause the destruction of liberalism. Again, a vacuum will be created and it might be filled with God-like descendants in the future.<sup>[8]</sup>

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## Conflicts of interest

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## References

1. Koehrsen W. The Vanquishing of War, Plague and Famine [Internet]. Will Koehrsen; 2017. Available from: <https://medium.com/@williamkoehrsen/the-vanquishing-of-war-plague-and-famine-b424ac967a41>. [Cited 2019 May 14].
2. WHO | Health systems [Internet]. WHO. Available from: [http://www.who.int/topics/health\\_systems/en/](http://www.who.int/topics/health_systems/en/). [Cited 2019 May 14].
3. Economic Possibilities for our Grandchildren by John Maynard Keynes 1930 [Internet]. Available from: <https://www.marxists.org/reference/subject/economics/keynes/1930/our-grandchildren.htm>. [Cited

- 2019 May 14].
4. Tomasik B. Artificial Intelligence and Its Implications for Future Suffering [Internet]. Foundational Research Institute; 2015. Available from: <https://foundational-research.org/artificial-intelligence-and-its-implications-for-future-suffering>. [Cited 2019 May 14].
  5. Bioethic Tools: Principles of Bioethics [Internet]. Available from: <https://depts.washington.edu/bioethx/tools/princpl.html>. [Cited 2019 May 14].
  6. Lakshminarayanan S. Role of government in public health: Current scenario in India and future scope. *J Family Community Med* 2011;18:26-30.
  7. Harari YN. *21 Lessons for the 21<sup>st</sup> Century*. London: Jonathan Cape; 2018. p. 368.
  8. Harari YN. *Homo Deus: A Brief History of Tomorrow*. London: Harvill Secker; 2016. p. 448.
  9. Newman MEJ. Power laws, Pareto distributions and Zipf's law. *Cities* 2013;30:59-67.
  10. Angelina Jolie's breast cancer op-ed cost the health system \$14 million in unnecessary tests [Internet]. Available from: <https://www.cnn.com/2016/12/15/angelina-jolies-breast-cancer-op-ed-cost-the-health-system-14-million-in-unnecessary-tests.html>. [Cited 2019 May 14].
  11. WDI-Home [Internet]. Available from: <http://datatopics.worldbank.org/world-development-indicators/>. [Cited 2019 May 14].
  12. Park K. *Park's Textbook of Preventive and Social Medicine*. Banarsidas Bhanot-Jabalpur; 2013.
  13. Jannetta A. Jennerian vaccination and the creation of a national public health agenda in Japan, 1850-1900. *Bull Hist Med* 2009;83:125-40.
  14. OECD. *Japan: Promoting Inclusive Growth for an Ageing Society* [Internet]. OECD; 2018. (Better Policies). Available from: [https://www.oecd-ilibrary.org/economics/japan-promoting-inclusive-growth-for-an-ageing-society\\_9789264299207-en](https://www.oecd-ilibrary.org/economics/japan-promoting-inclusive-growth-for-an-ageing-society_9789264299207-en). [Cited on 2019 May 14].