Global Scenario

Death is inevitable and it’s the ultimate truth that those who are born will die. Medical science have made tremendous amount of progress in the past 200 years and have delayed the death from a statistical prospective from last few decades with new generation of medicines and technologies. But all those people born in the world till now died and will be dying.

On an average 0.38 million people are born in the world every day and 0.15 million are dying with a growth rate of 1.1% per annum.\(^1,2\) We are adding 140 million people every year. Here is a gross inequality of population growth in developed and developing world being 4 times more children in the developing world because children are taken as asset who can help then in farm as well as other household activities. Although this growth in developing countries is tremendously not affecting increment in population because of high rate of death rate of under 5 children in the developing world which is 149/1000 on an average in compassion to 79/1000 in the developed world.\(^3\)

Once the mortality decreases they will start having less children as evident from Nepal’s population pyramid.\(^4\) (Fig 1 & 2)

Now the question is how, when, and where we are dying. In the hunting era, people mostly died being eaten by animals but when our life style changed and we started domesticating animals, started organized farming, such risk eased dramatically. Then came an era where many died by plague; statistics in one epidemic alone –around 50 million people died which was equivalent of 15% of total population at that time. With the identification of disease causing pathogen the formulation of antibiotics and introduction of vaccination, we could control on infective disease epidemic greatly but every time we beat the bugs they beat us by creating resistant strain giving rise to development of newer antibiotics as a cat and mouse race and naming it 3rd, 4th generation of antibiotics. However infective lesion controlled in mass scale but sometimes newer infection like HIV, Swine flu, bird flu, dengue, ebola, COVID-19 are some of the new killer in the field which are the product of climate and environmental changes. In the present era, more and more people have started dying of is ischemic heart disease, stroke and COPD being the 3 major cause of death worldwide top 2 being non-communicable disease.\(^5\)

Now let’s talk about when to die or what is the right time to die. In the spectrum of mean age of survival, Japan being the highest longevity country with average life expectancy of 84.67 years age and Central African Republic have the lowest life expectancy i.e. 53.35 years age.\(^6,7\) With this data, we can see that just like economy, people also have different life expectancy but spending on medicine is not directly related with longevity. USA spends highest in health per capital but their mean age of survival is not that great where as Japan has a modest expenditure and still have a high average life expectancy.

In economic term, if we calculate how many years spent to increase a life expectancy of one year, may be some country will top the rank in the world where they spend millions dollar to increase the life expectancy. However such data will not take into consideration the unaccountable of record health expenditure which do not
come under national health budget. From these aspect, we can come to the conclusion that that longevity is not directly proportional to economy and when it comes to individual, it has no relevance at all. If you are stuck with bad disease, then your mean survival will hardly change.

Every specialty of medicine is trying to prevent death from their specialty just merely making the probability of dying from another cause higher. It’s just like we are tossing a hot ball from one specialty to another until someone burns their hand. This is happening because death is inevitable. In medical school and their after, we are taught how to postpone death that also in the specialty we are trained in, we are not trained to look at life and death as a holistic process of each individual. It is high time that we start looking at death from such angle from early in medical college. So that we stop the hot ball tossing game.

To make the matter more clear let’s take an example of a person with severe heart disease is diagnosed with lung cancer. Both the cardiologist and the oncologist will make their best effort to avoid death from disease they are treating. While on the process the person develops kidney failure and the nephrologists gets into the picture, giving 2 dialysis sessions per week may be for months. His other organs also start declining and eventually liver gives in and the metabolites affect his brain making his judgment making capacity poor. So in a span of few months a nephrologists and neurologist join the team to prevent death from their respective field. The patient succumbs to coma and is taken into the ICU for ventilation where the interventionist joins in to become the leader of the whole process. The interventionist acts as if he is the gatekeeper for the passage to the next life but he will do everything for this patient to delay his departure to next stage. The patient does not want to withdraw life supporting systems and a patient is not brain dead so as to medically justify terminating intervention. Eventually the patient collapses, the heart stops but since do not resuscitate form was not signed by the family, a duty nurse starts the action preventing death during her duty period, patient heart revives, family wants continuation of treatment and the whole treatment is covered by health insurance. So in a personal basis no one is worried about the financial aspect. The institute is ok with the whole process since financially its generating money to the institute. But during this wholesum of period, from the diagnosis till the physical death of the patient, he never lived the single day meaningfully. The decision of his life was with the specialist and eventually when his judgment become poor, it was with the family.

Similarly if we look at the scenario on where people would not prefer to die, majority of population hesitate to take their last breath at hospital or any type of long term care. (Figure 3) but if we see the actual scenario about where people are dying, we find that almost equal number of people are dying in home as well as hospice and hospital (Figure 4) So its high time that we medical professional start looking at life from a different prospective and looking at death as part of our management system and make it as dignified as painless, may be a pleasant experiences, prepare the individual, the family and the institution to achieve this goal in a more realistic way. This is also not a justifiable and remarkable economic system on the personal bias, everyone should define what good death means to that individual.

A professional person should be able to guide him but they should define it themselves and then write down in black and white what they exactly want to do in each and every step of their critical moment. This could include the level of medical management they wishes to receive, the level of critical care, life supporting ICU care they want which can differ from different disease. What would be the expenditure they wish to accept, the organ they wish to denote, the types of funeral they want to have and the management of their socio-economic status they will leave behind. Such wishes should come in a pre-prescribed format so that none of more of the aspect is missed out.
On the other hand medical education should incorporate the chapter of death and teach medical student and the post graduate about death. This is equally true with nursing training where they already learn about death more than a doctor and a nurse is probably the person who is present in the bedside of a patient when death actually happens. With the development in the medical system we will be able to postpone death further but we should also not forget that our main aim is to give good quality of life to the person and the family. The quality of life may differ from person to person and from one family to another. Treatment like euthanasia or assisted death should be looked into is more ethical way so as it is utilized more but in a human way. Medical professionals should aspire to make life painless, joyful, meaningful & productive rather than merely prolonging it.

REFERENCES


