

and/or contribute to S&T on par with the developed West.

To what extent can education be privatized? Presently, there is an impression that education is much too privatized and commercialized. It is unconvincing that governments, state or central, are not able to fund education. Last but not the least, the three academies should give

some suggestions for a good and happy schooling.

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Why Darwin would hate mobile phones more than cancers?

Change in the genetic material of a population of organisms and its accumulation over generations leads to the adaptive evolution of an organism and the origin of new species. The genetic pool of a sexually reproducing organism varies even between individuals of the same species. The forces of natural selection favour the variations which provide adaptive fitness whereas selection occurs against unfavourable variations. Over generations, the favourable traits are increasingly accumulated leading to increased adaptation of an organism to its surroundings. Hence, in addition to ensuring survival, the adaptation should also ensure efficient reproduction to pass on the favourable traits to successive generations and create newer variations. These explanations for evolution were put forth by Charles Darwin and have been confirmed with increasing evidence.

Since reproduction ensures successive generations with more evolved offspring, evolution can be seen as fertility averaged over a long period of time¹. The essential crux of sexual reproduction that leads to adaptive evolution is its ability to produce genetic variations². The genetic variability maximizes heterozygosity with each new generation². Heterozygosity is beneficial, as it decreases the incidence of genetic abnormalities and most importantly improves the fertility³. It is not known how heterozygosity increases fertility, but evidence from many organisms supports the association³. Therefore, it can be said that with evolution of an organism there also occurs an increase in its fertility. On the other side, the

increase in fertility can enhance rate of evolution by producing more offspring. Essentially, evolution and fertility can be called two sides of a coin that cannot be separated. Contrary to this, a decrease in fertility will lead to decrease in the rate of adaptive evolution.

During the last few decades, human male fertility has declined rapidly as evidenced by decrease in sperm count and semen volume due to changes in lifestyle and environmental conditions^{4,5}. This reduction in fertility is gradual and will continue as the environmental changes are getting worse. The reduced fertility has not affected human population growth, which indicates that fertility is still optimal. On the contrary, the gradual decrease of fertility may affect the rate of adaptive evolution of humans over the future generations.

One of the human technologies which adversely affect human fertility is mobile phone radiations. The mobile phone radiations affect sperm number, sperm density, sperm motility and sperm morphology leading to impaired fertility^{6–8}. All this damage can occur even when exposure is of a short duration. The decrease in cost of production of mobile phones and effective advertisement strategies has ensured that every individual can afford a personal mobile phone. The effects of mobile phone usage on male fertility are so striking that they have been even called the nemesis of modern man⁹. This means that human fertility is further decreasing which may adversely affect our adaptive evolution.

Mobile phone usage can be compared to cancer in terms of their effects on

human survival. Cancers are presently not treatable and can lead to mortality whereas mobile phone usage is presently not preventable and can lead to decreased fertility. A common man may perceive cancer as more dangerous than the mobile phone. However, Darwin would choose to kill the mobile phones over cancers as the former affects fertility (ultimately affects rate of adaptive evolution) while the latter usually strikes when fertility no longer matters (most cancers affect aged individuals).

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