Why the public healthcare system is seeing a ‘market failure’

With ‘externalities’ such as cost of treatment and fear of contracting Covid-19 hindering public health, it is upto the government to intervene and strengthen the system by increasing expenditure

Funnily enough, the “middle class” in India has seldom belonged to the middle of the income distribution. With limited resources at their disposal, they has never been the driver of demand for public health; and consequently, they have largely been apathetic to it. Well, until the coronavirus hit. Suddenly, the middle class is interested now more than ever in the state of the public healthcare system and is heard routinely complaining about the shoddy conditions of public hospitals, the crammed hospital wards and or even the quality of *dal-chawal* being served to the patients. For once, they seem to be moved by the gross inadequacies of public services in the same way as those who usually depend on them.

The reasons for this may be hidden in what economists widely call a ‘market failure’, engendered by Covid-19. A lasting effect of the current crisis may well be a push to rekindle widespread political and social discourse about the frail Indian public health sector.

Efficient market behaviour

To understand the root of market failure, it is useful to look at the transmission dynamics of the disease. The growth rate of the number of Covid-19 cases is exponential, meaning the number of cases increases at a rate proportional to the current figures. An infected person

ends up directly infecting about 2-2.5 persons, each of whom ends up adding the same factor of infected people on an average. This exponential growth has important efficiency consequences for the market.

The notion of an ‘efficient market’ can be retraced to Adam Smith, who influenced modern day economics in more fundamental ways than one. Smith claimed that if individuals in the society pursue their narrow self-interest, then societal welfare will be maximised. “In this (maximising self-interest) he (the individual) is led by an invisible hand to promote an end which was not part of his intention. By pursuing his own interest, he frequently promoted that of the society more effectually than when he really intends to promote it.”

The idea that an invisible hand aggregates individual behaviour to maximise societal welfare has since been formalised by eminent economists such as Kenneth Arrow and Gérard Debreu, as the First Welfare Theorem of Economics and has since laid the intellectual foundation for *laissez-faire* and the way our economic system is currently organised. As an illustration, suppose someone is ill, goes to a hospital, pays a fee and gets herself treated. For this individual, the benefit of getting cured is in some sense equal to the cost of the treatment. Exchanges in the market happen unhindered as long as patients are willing to pay what hospitals are willing to receive.

System breakdown

While Smith and Arrow were well aware, not enough attention is paid to the conditions wherein the link between individual self-interest maximisation and maximisation of social welfare breaks down. The presence of an externality is one such condition. Imagine the person in question has been affected by coronavirus and shows mild symptoms. The benefit of their treatment accrues not just to them but to a large number of people, who could have been infected due to the exponential growth path of the disease. Put a money value to this benefit and it is clear that the cost they will be willing to pay is much lower than the total benefit of their treatment.

This additional benefit to a third party (or parties) creates a wedge between willingness to pay and the amount asked to pay. Joseph Stiglitz in his Nobel prize lecture famously remarked that the reason for such a market failure is that “the (invisible) hand...is simply not there — or at least that if it is there, it is palsied.”

Positive externalities such as the one above can encourage people not to go through the hurdle of tests, self-quarantine, maintaining social distancing etc, since the cost is private, but the benefit is social. On the other hand, a contagion-driven negative externality can prevent private healthcare from servicing Covid-19 patients. The benefit that a private hospital receives is the treatment fee paid by the patient, while the cost of treating the patient can be unusually high.

Think of a situation where the healthcare workers get infected while treating the Covid-19 patients, who then have to be treated and taken care of. More importantly, the fear of getting infected with the disease or stigma associated with it will almost certainly lead to a mass

exodus of patients with other illness. Consequently, the negative externality of treating Covid-19, on the one hand, increases the cost of the treatment; and on the other, it leads to loss of business.

Given this reasoning, it is not surprising that private healthcare providers have by and large maintained considerable social distance from the Covid-19 patients. Of 530 labs currently testing for coronavirus, less than 30 per cent are private and the negative externality effects are less in labs relative to hospitals. A vast majority of the hospitals currently treating Covid-19 patients are public. In fact, private hospitals have been found insisting that all patients, even emergency ones, be tested for Covid-19 before they are admitted to the hospitals, something which runs against the current ICMR guidelines. On some occasions, and by some accounts routinely, private hospitals have turned down even critically-ill patients.

Public health spends

With externality-driven economic forces which makes non-participation a rationale thing to do for private institutions, it is imperative for the government to step in. Market failures of the kind discussed above can only be resolved through government intervention, and therefore the need for public health infrastructure becomes apparent.

In fact, public spending in health is perhaps the most significant predictor of success so far, when combatting Covid-19 is concerned. Kerala and Andhra Pradesh have per capita health spends of ₹2,060 and ₹1,498, respectively, while West Bengal is sandwiched between Uttar Pradesh and Bihar at ₹868. Not coincidentally, despite a have large share of the aging population, Kerala and Andhra Pradesh have been relatively successful in containing the spread of the coronavirus. Internationally, some of the best success stories have come from countries with a strong bulwark of public health infrastructure such as Germany, Denmark, Norway and Vietnam.

The Finance Minister has only recently announced an increase in planned public health expenditure. However, it is not clear whether this increase is a temporary measure related to the Covid-19 outbreak, or a more permanent one aimed at sustained improvement of the public health infrastructure of the country. While there is a need to immediately increase expenditures related to Covid-19, public health expenses must not be pulled back even after the crises eases.

We may want to remind the Finance Minister of the enormous positive externality of public investments in health (and education), thereby making it necessary for the government to intervene and resurrect failed markets. Till such time, the middle class can only fret about the inadequacies of public health infrastructure.

Banerjee is an associate professor of economics and Majumdar is a research associate at IIM-Bangalore