Why It Is Not Always Easy to Convince Graduate Students in Healthcare Administration of the Value of Neoclassical Microeconomic Theory?

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Introduction:
Can we really convince our graduate students in the field of Healthcare Administration of the value of the application of neoclassical microeconomic theory to healthcare markets? In my experience, this is not always an easy task. My MHA students, for the most part, have had minimum exposure to microeconomic theory in their undergraduate education. However, mostly being professionals, these graduate students have had much experience in the practical aspects of health industry and health markets. As a result of their experience, these students are often reluctant to being convinced of the value of that application. But, how do we explain this reluctance? There seems to be at least two responses of this question. First, the application of neoclassical microeconomics to healthcare markets requires making some very unrealistic assumptions. Many economists, in particular heterodox ones, have difficulty accepting these unrealistic assumptions, in particular those associated with perfect competition. Regarding the unrealism of these assumptions, and the existence of free markets, MIT economist and former Dean of the Sloan School of Business Rester Thurow stated in 1983 that:” every economist
knows a dozen of restrictive assumptions that are necessary to prove that a free market is the best possible economic game, but they tend to be forgotten in the play of events.”

For health care markets too to function properly and efficiently, certain assumptions have to be made. In their book the Economics of Health Reconsidered, Thomas Rice and Lynn Unruh indicate various assumptions that are needed if (healthcare) markets are to function properly. Among the necessary assumptions these authors make are the following: Regarding demand for health, insurance, and health services these assumptions are: (1) A person is the best judge of his or her own welfare, (2) Consumers have sufficient information to make good choices, (3) Consumers can accurately predict the result of their consumption decisions, (4) Individuals are rational, (5) Social welfare is solely the sum of individual utilities. (6) There exist no negative externalities of consumption, (7) there are no positive externalities of consumption, and (8) Consumer tastes are predetermined.

Regarding healthcare markets as a whole, they also make certain necessary assumptions. Among the necessary assumptions they make are: (1) Supply and demand are independently determined, (2) Firms do not have any monopoly power and, (3) There exist no increasing returns to scale.

Anyone familiar with healthcare markets would know that these assumptions are not realistic.

The second reason for the difficulty of the application of neoclassical microeconomic theory to healthcare is the uniqueness of healthcare markets. In other words, the fact that healthcare as a product has certain characteristics that are absent in other products, thus it cannot always be explained by the same economic principles applied to markets for most other goods and services. For one thing, in contrast to the demand for a typical product, demand for healthcare does not
directly depend on utility/satisfaction. While the consumption of a typical product provides the consumer with satisfaction and pleasure (i.e. utility), consumption of the healthcare product—i.e. various medical procedures, surgery, etc. – does not lead to pleasure/utility directly. Rather, individuals consume the healthcare product because it can help to make them healthy. In other words, it is being healthy that provides satisfaction for the individual, and not healthcare.

Furthermore, health, as the cause of utility/satisfaction, is not caused by and resulted from healthcare alone. For, individual health is also resulted from good and healthy nutrition, exercise, rest, life style, genetics, certain environmental factors, and others. In terms of the uniqueness of health product, in a 1963 seminal article, Nobel Laureate economist Kenneth Arrow spoke of numerous imperfections that are associated with healthcare as a product. Among the imperfections indicated by Arrow is the tremendous uncertainty associated with the demand for healthcare which gives rise to the market for insurance. As argued by Arrow, this market for insurance can in turn lead to adverse selection.

According to Robert Lee, the uniqueness of the healthcare product can also be explained by the fact that its demand is more complex than the demand for other products. To him, four reasons explain this complexity. (1) The price of healthcare often depends on insurance coverage which, because of powerful insurance effects on demand, the analysis of its demand becomes more complex. (2) The links between medical care as a product and health outcomes are often difficult to ascertain for both the population level and the individual level. As a result, consumers of healthcare, who are forced to make hard choices under these uncertain situations, may end up making bad choices. (3) This complexity leads to poor information about cost and benefits of healthcare. (4) The net effect of this complexity and consumer’s insufficient information is that
producers/providers of healthcare and health professionals have much influence on demand for healthcare.

As discussed earlier, for healthcare markets to be functioning properly, among other things: individuals consumers of healthcare must be best judges of their own well-being (in this case health), they must have sufficient information to make good choices (here about their health), they must be able to accurately predict the result of their healthcare choices they have made, and they have to be rational as individual decisions makers. Additionally, there are no positive or negative externalities associated with healthcare markets, that demand (and supply for that matter) is independently determined, and others. Many less orthodox economists, particularly those associated with behavioral economics, would have difficulty accepting those assumptions. Many, for example, would agree with Herbert Simon that individual rationality is at best bounded.

There are many ways to challenge those assumptions, thus provide reasons for the argument that the healthcare market is indeed complex and that healthcare as a commodity is very different from other commodities. While various economists have discussed the possibility of market failures associated with asymmetry of information in the market for only certain goods such as used cares, however, market failures resulting from information asymmetries in the markets for healthcare products are pervasive and undeniable. In fact, in the market for healthcare when transactions occur one party—the provider—always has more information that the other party—the patient. This asymmetry may lead to a situation that the party with more information may take advantage of the party with less information. In other words, it would lead to opportunism. Unaware of their best choices, since they know less about their healthcare options than physicians and other health professional, patients may accept recommendations for therapies and
procedures that are unnecessary or at least not cost-effective. And, if patients know their vulnerabilities to physicians and their self-serving advice and recommendations, there is a possibility that patients would not accept the recommendations that might be to their best interest.

Even if we assume the rationality of individuals when it comes to seeking medical treatment, we should actually assume that they are rationally ignorant. In other words, although they might be rational about their attempt to seek health, they are still ignorant about their medical decisions, since medical decisions are complex and patients do not have the necessary information and skills to evaluate their various options. Further, information required may take too much time or be too costly to obtain. This rational ignorance is the reason for patients as principals to seek physicians as their agents. Obviously, using physicians as their agents reduces the consequences of their rational ignorance. However, the problem does not completely disappear, since agents always have the incentive of taking advantage of principals, by adhering to opportunism. Still another difficulty may arise when patients cannot distinguish good health outcomes/treatments from bad ones.

In contrast to the above assumption that demand is determined independent of supply, in healthcare markets, the demand by individual patients depends on incentives for providers, thus opportunism.

Opportunism resulting from information asymmetries in H.C. may take many forms, including fraud. Example is deliberately billing for a treatment/test not actually provided. Less extreme examples may include certain treatments and therapies of questionable value to the patient,
referring patients to specialists for less serious procedures, or even defensive medicine to protect one’s reputation and even ignorance.

Generally speaking, three situations make asymmetric information problematic and complex in the case of healthcare markets. These are:

1- Insurance, since it pays for the service of healthcare providers, it creates a principle-agent relationship which is absent in most other markets.

2- The phenomenon of health insurance reduces the incentives that patients would otherwise have in monitoring the need for certain procedures and the performance of healthcare providers. Insurance also reduces the exposure of patients to opportunism on the part of providers. Of course, as Arrow indicated in his 1963 paper, insurers cannot easily determine whether or not a particular treatment/procedure is actually required.

3- The threat of opportunism is very real in healthcare markets because asymmetric information is intrinsic to most patient-relationships and, as a result, patients seek the services of providers because they wish to seek information.