



Research Paper

An In-Depth Analysis of the Effectiveness of Behavioural Economics in the Health Sector and its Applicability to Business Productivity and Consumer Satisfaction

Mannat Bhutani

Abstract: Research has indicated that behavioural economics is an important factor in the health sector of the country. A highly satisfied consumer in all aspects of the medical field tends to increase the business productivity of the firms involved as well as reaffirm consumer satisfaction. The two seem to go together. This is not true in the case of villages and lower-income group citizens who are very likely to be taken for a ride due to their illiteracy, limited knowledge, and inadequate healthcare facilities. It is here that the government should enter and provide both facilities and insurance such that the poor are not made Gini pigs by the unscrupulous medical fraternity. The primary survey has reiterated the above.

Research Question: The paper will analyze the impact of behavioural economics in various aspects of consumer behaviour in the real world. The impact that this has on purchase decisions both before, during and post-purchase. How does this impact the marketing and production strategies of various firms in the health sector? Do these companies take cognizance of this branch of economics? How important are they? These and more will be attempted during the research paper.

Key Words: Behavioral economics, consumer behaviour, satisfaction, healthcare, consumer decisions, medical services, quality.

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I. Introduction:

Behavioral economics has its roots in the confluence of behaviour analysis and microeconomics (Hursh, 1980 and 1984) who propagated that this aspect should include psychology as being in touch with actual consumer behaviour of both consumers and producers. This has been revealed by consumer research and marketing science (Foxall, 1998; Hantula & Wells, 2013). All these aspects elaborate on the principle of reinforcement as a means of exploring the functional relationship between consumption and its outcome. The analysis applies to consumer choice in the context of modern marketing-oriented economics as well as in recent times to alternate kinds of economies, to the extent of non-human animal behaviour.

In this research, consumer behaviour seems to occupy an extremely important position in understanding and capturing those behavioural concepts that may not directly be indicated in any experimental method. The consumer behaviour and buying behaviour are two separate but interrelated concepts. Consumer Behaviour is an insight into understanding purchase decisions of buyers before, during and post whereas consumption behaviour is the actual amount bought and sold.

Figure 1: Image of Reach of Consumer Behaviour



Source: alamy.com

II. Definition

It is important for firms to understand how behavioural economics and the concept of consumer behaviour impact decision-making, which has a direct bearing on the buying patterns of consumers. Economics today has a mix of both psychology and rationality in understanding the reasons why consumption patterns work in a particular manner.

2.1 Behavioral Economics

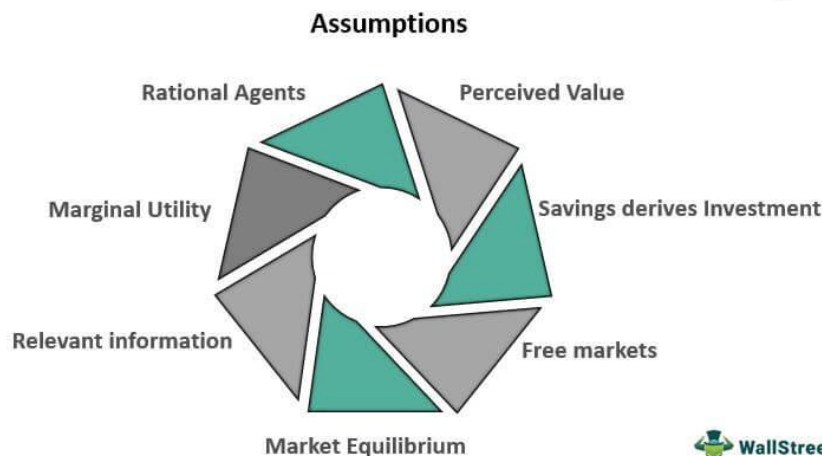
The economist Richard Thaler stated that people think of value in relative rather than absolute terms. Behavioural economics combines elements of psychology and economics to understand why and how people behave the way they do in the real world. This is different from neo-classical economics, which assumes that most people have well-defined preferences and make well-informed, self-interested decisions based on those choices.

It studies the effects of psychological, cognitive, emotional, cultural, and social factors on the decisions of individuals or institutions. This line of thinking is completely different from what has been indicated in classical and neo-classical economic theories. The neo-classical theory is a broad approach that attempts to explain production that arises from the consumption of goods and services as well as income distribution through supply and demand. It focuses on supply and demand being the driving forces behind the production pricing and consumption of goods and services. The major principle behind the neo-classical approach is the emphasis on individual or group behaviour and human relations in determining productivity. The concept of using supply and demand to clear the market or reach the equilibrium level is based on rational human behaviour which always assumes that a rational individual would demand more than less.

It is this basic assumption of rationality that is now being questioned and the understanding that consumer behaviour in fact can be 'nudged' to move in a particular direction.

Figure 2: Simple picturization of Neoclassical economic theory

Neoclassical Economics Theory



Source: WallStreetMojo



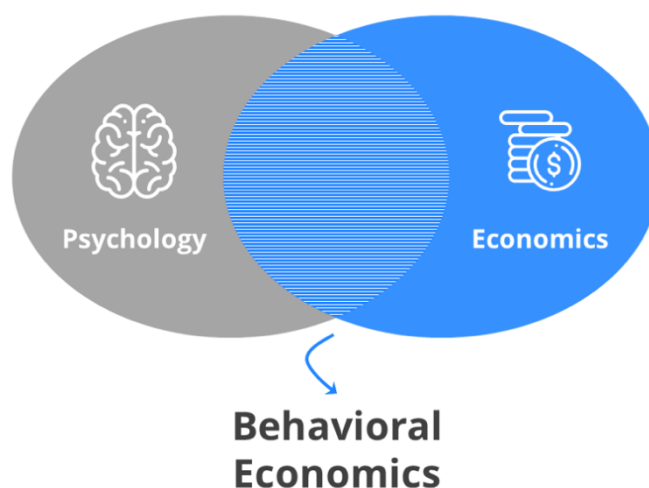


Figure 3: Behavioural Economics
Source: Slidemodel.com

The difference between the two is that the earlier neoclassical theories assumed rationality which is essentially defined as self-interest being paramount. The rational agents i.e. the consumer is assumed to make a choice in a consistent manner. These individuals define their preferences according to the axioms of:

- completeness
- reflexivity
- transitivity
- continuity

Behavioural economics on the other hand has increased interest and further research on the application of this branch to therapeutic settings. Initially, this branch began as a purely academic attempt at modelling irrational consumer choices, thereby challenging the notion of the rational consumer of traditional economics. Recently, behavioural economics in its academic pursuit has become extremely important for firms and businesses to use conclusions of various studies in their marketing strategies. It is a branch that attempts to understand decision-making choices and thus integrates behavioural sciences with economics principles. It assumes irrationality in decision making allowing for the fact that individuals are susceptible to temptations and tend to make poor and rash decisions even though there are better options that could improve long-term outputs. Blended between cognitive bias, heuristics, bounded rationalities and herd mentality, people tend to do things that may not always be in their best interest.

III. Consumer Behaviour

The above is defined as actions and decisions that people or households make when they choose, buy, use, and dispose of a product or service. Many psychological, sociological, and cultural elements play a role in how consumers engage with the market. This is the study of individuals, groups, or organizations and all the activities associated with the purchase, use and disposal of goods and services. It consists of consumer's emotions, attitudes and preferences that affect buying behaviour. A study on consumer buying behaviour that includes forces that influence them in making their decisions in their final choice of brand at a given time, place, and price.

Figure 4: Factors Involved in Consumer Decision



Source: getuplearn.com

There are four types of consumer behaviours:

- Complex buying behaviour.
- Dissonance-reducing buying behaviour.
- Habitual buying behaviour.
- Variety-seeking buying behaviour.

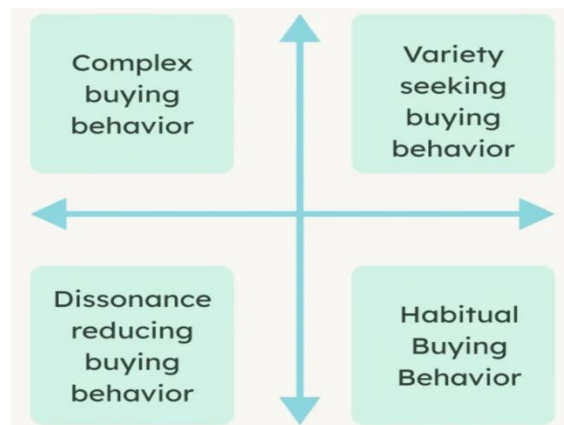


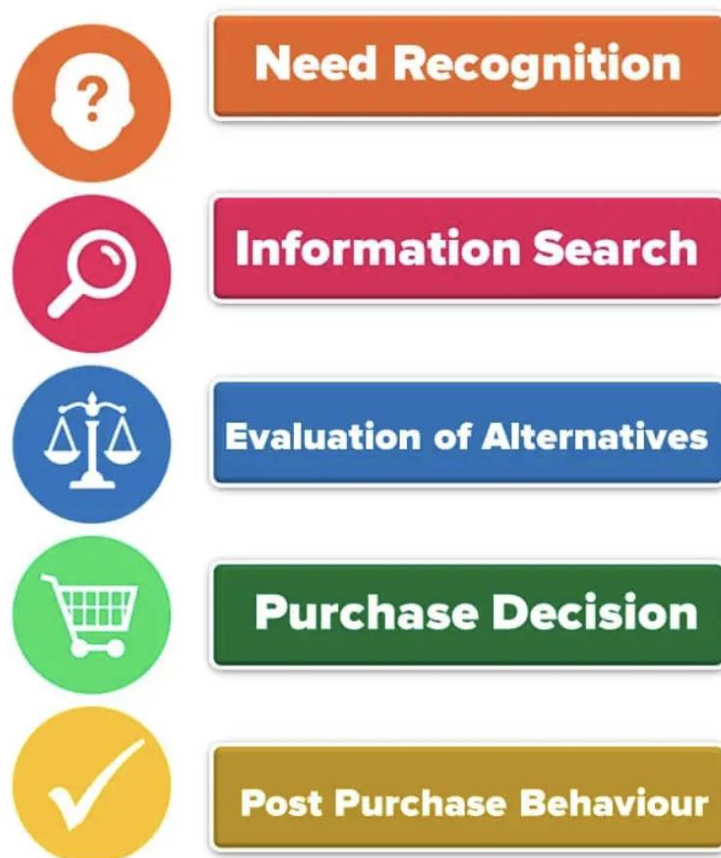
Figure 5: Types of Consumer Behaviour

Source: fluentsupport.com

There are five stages of consumer behaviour that consumers evaluate while making a purchase. These are:

- Problem Recognition
- Information Search
- Alternatives Evaluation
- Purchase Decision
- Post Purchase Evaluation

Figure 6: Stages of Consumer Behaviour



Source: getuplearn.com

3.1 Consumption Pattern and its Impact on Business Decisions and Firm's Profitability in the Health Sector

The four stages of consumer behaviour out of the five stated above which are important for healthcare marketing are the following:

- **Awareness:** Healthcare consumers may not be looking for healthcare services now but the fact that they might need it in the future tends to make them establish basic familiarity with the available options. The healthcare sector should take advantage of this and start posting appealing content that can capture the audience's attention and, in the bargain, establish familiarity and build trust with the brand as well as the services provided by it. This could be achieved through a blog, content hub, social media, and direct mail that reaches the widest possible audience of potential patients.
- **Active Evaluation:** This is the second stage when a consumer realizes the need for healthcare facilities. There is a transition from awareness to evaluation. The patient starts researching options. Consumer marketing behaviour in healthcare essentially involves meeting a potential consumer directly in their interest, especially during the decision cycle. The research by the patient involves reading the content that has been posted on various groups. The content that is posted must be meaningful and relevant.
- **Decision Making:** This is the stage when the consumer has completed his/her research and may have indicated their preferences for a particular healthcare service provider. For the healthcare company, this becomes an important test in the marketing of healthcare services. Delivering relevant content that offers information and an opportunity to connect with minimum fuss helps in choosing the service provider.

- Post Purchase: Creating custom content that focuses on the patient's area of interest can ensure that they keep the healthcare service in mind not only for themselves but for referrals as well.

Figure 7: Consumer Satisfaction in the Healthcare Sector



Source: freshworks.com

Consumer satisfaction in this sector must consider convenience, cost, coordination, courtesy, information, and quality. In this sphere, the healthcare sector must consider patients as consumers. This represents a multi-dimensional concept which is a cumulative effect of different factors. Providers need to understand that the process of consumption in healthcare is very different and complex due to the nature of the needs, consumption motivation, and complexity of the service. Social factors are extremely important due to the fact that these services are dependent majorly on the social interactions of the patients who contribute to their perception regarding post-consumption satisfaction. This can influence the buying decision of a service.

3.2 The Impact of Social Factors on Consumer Health Sector

In the case of the health sector, consumer behaviour becomes more complex as compared to other services as it is influenced by special motivations like the need for proper health status or even the need to recover from a certain disease. The influence of social factors is very complex right from the concern related to hygiene and appearance to the severity of any disease. It can range from the provision of healthcare services, and sustainable consumption right up to unsatisfied consumer expectations.

Social network-related factors are important as an individual will consult his own social network and be influenced in the bargain before one decides on the utilization of health care services and eventual consumption.

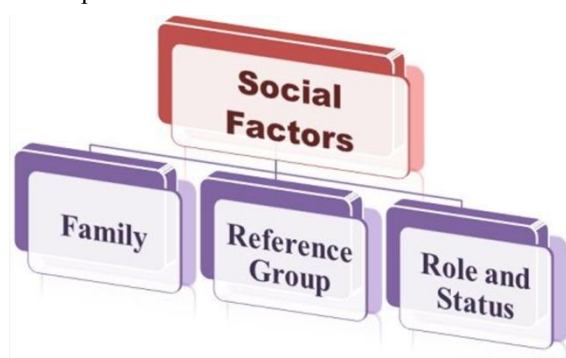
Social media influences product and service brands that indicate a level of satisfaction status. These have the ability to communicate information about their owners as well as the capacity for social networking. Within an individual's social network group, each participant would assume different roles. The roles would be unique and would also be perceived by different people in different ways. This perception would depend on the expectations of an individual. The social status is also associated with a level of respect that other members are willing to associate that person with. To understand the complexity of this relationship of consumers with other persons, scientists have labelled it the concept of "self-consciousness" (Allan Fenigstein, Michael F., Scheier, Arnold H Buss, 1975).

This idea of self-consciousness is further divided into two major types:

1. People Publicly Self-Conscious: This is concerned about how one appears to others.
2. People with Self-Consciousness: This focuses more on one's own thoughts and feelings.

Many studies have indicated that consumer behaviour varies according to their susceptibility to interpersonal influence, implying that *status* plays a vital role in communicating information about their social relations. This is very similar to the concept of *conspicuous consumption* that is associated with prestigious products or services, being motivated by the desire of individuals to transmit their social status to others, e.g. people tend to emulate consumption patterns that their idols are consuming.

Figure 8: Importance of Social Factors in Consumer Decisions



Source: businessjargons.com

1. Different Marketing Strategies Influencing Consumer Behavior in The Healthcare Sector

The seven important factors of marketing in any sector and especially the healthcare sector is a mix of:

- PEOPLE
- PRODUCT
- PRICE
- PROMOTION
- PLACE
- PACKAGING
- POSITIONING

All the seven change very quickly especially in healthcare marketing and they need to be examined regularly with an unbiased eye to sustain maximum marketing results. Some of the categories that have been listed above tend to overlap which is why it is necessary to keep an open mind while examining their relevance. The situation will be different depending on healthcare organizations, medical professions, and healthcare practices.

Healthcare is a sector that needs its own approach and presents features that are not found in other industries (Thomas RK, 2008, Ed, Springer). Marketing in this sector is an interdisciplinary field as it uses certain concepts, methods, and techniques that are specific to both classical and social marketing. The important aspect of this is that the effectiveness of marketing in the healthcare sector can be found in the image of a healthy population, detection of ill category of people, ensuring the treatment of ill people through a rehabilitation process, professional and social reintegration of ill people.

An effective marketing strategy involves an in-depth investigation of the patient's needs, identifying latent needs, and offering new health services that patients may not have explicitly requested. (Purcarea VL.2017, Ed. Universitara "Carol Davila").

Structural changes in society force health systems to accelerate towards the future. Health providers need to consider the current needs and provide proper management and marketing abilities for the future.

The reason that healthcare services differ from other services is due to the nature of the demand for health services. The beneficiary of the service may not be the target of the marketing campaign as it is the physician who decides what, where, when and how should a particular service/medicine be provided. The decision maker then is the doctor, the health plan representative or a family member who takes responsibility and makes the decisions. As the services used in healthcare are complicated to explain to a layperson, a specialized professional must be involved. Another challenge that arises is that not all potential clients are considered desirable for a particular service. This happens when the government necessitates that a particular service must be provided at a nominal cost to certain sections of society, in which case the healthcare provider would not like to attract too many from this category.

All the above challenges have led to certain providers specifying their marketing approach to be:

- From mass approach to specific approach
- From image marketing to service marketing
- From a health episode to a long-lasting relationship
- From ignoring market to market intelligence
- From low-tech to high-tech

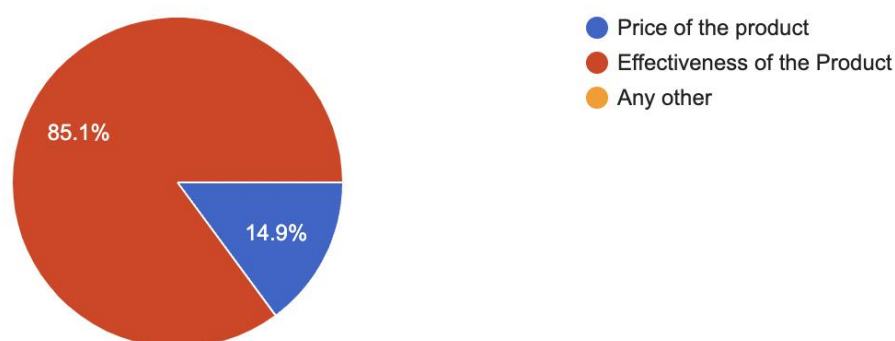
Marketing plays an important role for healthcare professionals to create, communicate and provide value to their target market. Their aim is to create a high level of consumer satisfaction so that they return to the same supplier. Marketing specialists have used traditional methods like marketing research, advertising, promotional sales, and sales management along with new ones like technology and new concepts. A large amount of information about a product is received by commercial media, but in this sector, a major chunk comes from recommendations and independent authorities, for example, physicians who find out about new drugs and services from commercial sources and validate them from other physicians.

The patient on the other hand expects a certain standard of health benefits from his chosen service provider. He/She makes his own preferences of evaluating attributes and beliefs that correspond to each brand (Kotler P, et al, July 2006, Harvard Business Review). The consumer becomes an indispensable factor for any service. Their presence has implications for the medical organization's activity. Any tangible element that the healthcare consumer meets is part of the health service delivery process and will lead to changes in the patient's behaviour. The consumer has multiple functions in the production of services and many specialists consider them to be "External Human Resource". Patient satisfaction is the objective and for this specialized staff of the organization needs to be receptive and sensitive to the patient's suggestions and complaints. A correct image of the provision of prompt and promised services requires continuous improvement such that they exceed the expectations of the patient. The health service provider needs to be able to detect opportunities and threats in the market in which they operate. The marketing policies specific to health services are complex as it needs to consider internal and external factors, interdependencies, favourable and unfavourable impact as well as future development of the service. As patients have many options the choice of healthcare services needs to be well differentiated, memorable and unique, especially in the present digital era, digital marketing will have to resonate with the consumers.

2. Analysis of Primary Data Collected with Respect to the Health Care Sector

A Google form was created and sent to various respondents of different age groups to understand the factors in the healthcare sector that are paramount to them. Forty-seven responses were elicited, the analysis and the findings are indicated below:

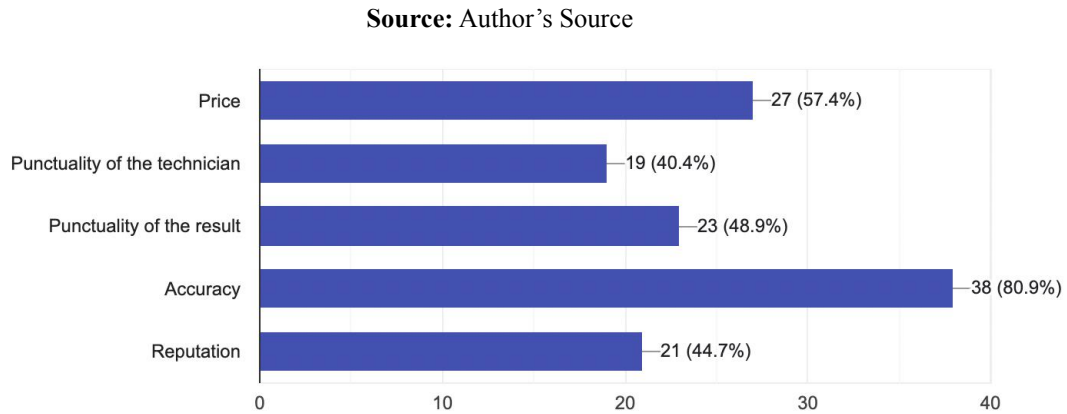
Figure 9: Factors influencing consumer choice.



Source: Author's Source

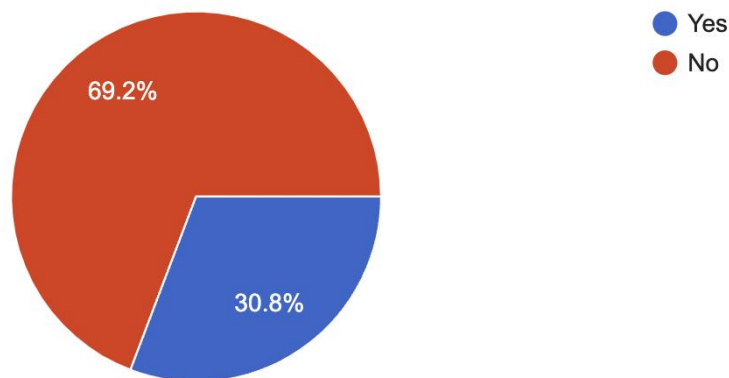
According to the survey, the effectiveness of the product is paramount. 85.1% indicated their preference for effectiveness.

Figure 10: Important factors that influenced the respondent’s decision.



On perusing the above data, all of them seem to be in a similar bandwidth but the most important amongst them is accuracy.

Figure 11: Price V/s accuracy in health services



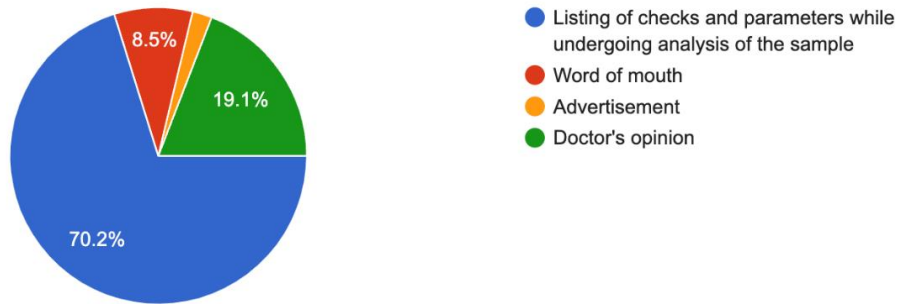
Source: Author’s Source

From the responses given price plays a secondary role vis a vis accuracy. In health services, as should be the case, accuracy (69.2%) is extremely important.

On further investigation, on the meaning of ‘accuracy’, the responses, by and large, indicated that for a higher income group, it was only accuracy that was the main factor. The price might become important for lower strata of income. It seemed that no respondent was willing to cut corners with respect to health.

All the respondents were quite clear that health cannot be compromised. They would like accuracy and quality at a minimum cost. Most of them felt that accuracy and quality should be accredited by a government agency, and this should be made mandatory for all health stakeholders. Not only is accreditation important but advertisements by the health ministry should be widely spread so that the importance of this reaches each citizen of the country.

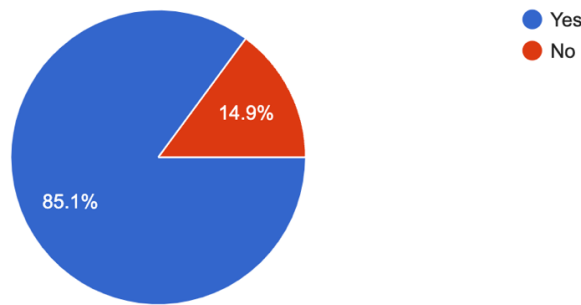
Figure 12: Factors ensuring accuracy.



Source: Author's source

As health is a major dimension in everyone's life, the survey indicated that a listing of checks and various parameters should be clearly listed when the pathologist is undergoing analysis of various samples.

Figure 13: Influence of medical firms on individual's decisions

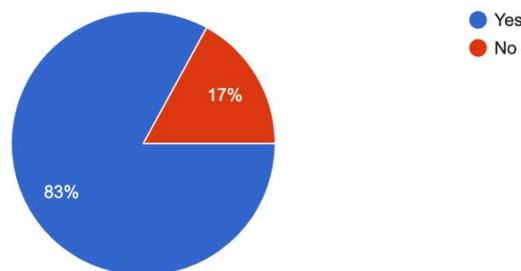


Source: Author's Source

The sample indicated that the name of the medical firm is an extremely important factor in a patient's decision-making process. For example, -Dr. Path Lab, Dr. Dang's, and Tata 1mg are well-known firms that have the backing of either prominent doctors or big conglomerates.

On asking the respondents as to what their reasons were for choosing pathological laboratories, the most common answer was its reputation and whether it had been in existence for a fairly long period of time. Publicity does play a role in the way the company comes in the eyes of the patients but further use of the services is wholly dependent upon its reputation.

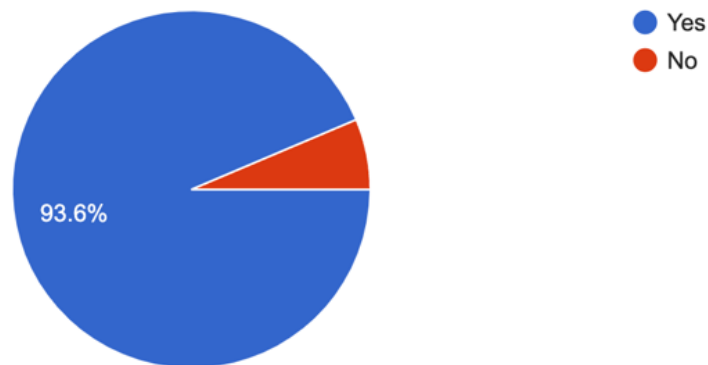
Figure 14: Is health manipulated?



Source: Author's Source

Most of the respondents felt that health is manipulated by large companies and hospitals, as it is an extremely sensitive issue and patients are willing to spend a lot so that their health is robust. There have been cases when hospitals and doctors have added pathological tests to a patient's prescription which may not have been necessary. The fear of not being medically fit tends to lead to the patient undergoing all of them. The other reasons for being influenced are illiteracy, publicity, and advertisements.

Figure 15: Importance of literacy



Source: Author's Source

The figure above indicates that 93.6% of the respondents felt that illiterate patients are the ones who are most gullible and can be taken for a ride by the medical fraternity. This was seen when the impact of being 'gullible' was more apparent in tier 2 and tier 3 cities where the number of uneducated is much more than in metropolitan cities and the availability of hospitals, laboratories and doctors are in short supply.

Education and level of income seem to be the two most important factors that were responsible according to the respondents in deciding the course of medical treatment. Blindly accepting certain medical treatment seems to be the pattern in villages and tier 2, 3 and 4 cities.

IV. Conclusion

It is extremely apparent from the available research as well as from the primary data that was collected that medical well-being, quality of the medicine, tests and the doctor were paramount for all the respondents. In the milieu of the large numbers of facilities available in all the cases listed above, the respondents who were least educated, poor, and lived in villages and away from metropolitan cities were the ones who could be swayed easily by quacks and unscrupulous touts that were employed by either the medical companies or by dubious hospitals and shady pathological labs. One of the reasons that the above is rampant is due to a lack of medical facilities in small towns and villages. It is here that the government needs to step in and provide adequate health along with medical insurance to the rural and urban poor such that they can get adequate medical aid wherever they stay.

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Appendix

https://docs.google.com/forms/d/e/1FAIpQLSfufGdie48nXU8dWsanZwaEd2IQLLQRlxzthxXjbXsASfTmSw/viewform?usp=sf_link

https://docs.google.com/spreadsheets/d/14N8IFRsIyiO5MUWf-AKuCVRAph0_pqDnIqDjJv2EzUc/edit?usp=sharing