Evolving Scenario In Indian Blood Transfusion Industry: Need for a Study on Re Look at Customer Perceptions and Marketing Strategies

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ABSTRACT

The purpose of the study is to assess the rapid strides that Blood Transfusion in India is going through currently. The resultant impact on the Industry catering to this sector, and the need for a re-look at the Marketing Strategies under the resulting customer perceptions. The study proposes to reassess these new market influencing factors from a customer perspective, their reach on the buying behaviour from the present, the potential impact on the industry stakeholders to their current marketing & promotional strategies and propose an alternate marketing strategy (if required ) for the new market order. The object of this study was the data on blood collection and related industry post-2012 to date. The blood collection figures and the relevant industry, secondary data were assessed as were the various mergers and acquisitions that happened during the period and the new entrants into the market. The recent amendments in the Drugs & Cosmetics Act of 1940 which govern the Blood Transfusion in India were looked at as well. The resulting assessment is that there is a paradigm shift in the blood transfusion industry in India. There needs to be a reassessment as to the requirements of the benefits from a patient point of view, from a blood centre (customer point of view) and a real-time re-look at the current ways and methods to take the new technologies to the customer most efficiently and affordably.

INTRODUCTION

Blood is a connective tissue within the human body. Composition of blood is predominantly plasma viscous in nature and with other components like Red Cells, Platelets and white cells floating in them. Plasma contains water which is the primary makeup of plasma and then it has enzymes, hormones, antibodies, nutrients, gases, salts, proteins and metabolites. Blood and its transfusion is highly regulated worldwide and classified as a drug in India– which can potentially be only produced and sourced from a healthy human being – which means that blood can be made available to the needy only on a purely altruistic nature from a willing blood donor and not produced industrially.

From the Table 1, as per the National Health Profile report, the total population in India is 1.33 billion. The economic output per person in our country is 2015 US dollars. The cost of treatment has been on the rise in India, leading to an imbalance in gaining access to health care facilities. India spends
only 1.7% of its GDP as public expenditure on health. Even though there are 1.33 billion people in India, the total blood collection is just 11 million. In our country, only 10 out of 1000 people donate blood at the available 2903 blood collection sites.

Blood Transfusion Service (BTS) is the most critical part of a modern health care system and the deliverance of medical care. The blood which is collected from the donor and transfused must be tested and certified safe concerning preventing transmission of HIV, Hepatitis and other pathogens to the patient. In addition to being safe blood, blood transfused should also be clinically effective and of consistent quality as per norms laid down. The common man always has the fundamental right to have access to safe blood and its products, and it becomes the responsibility of the Government or the National Health Authority of the specific country to ensure this. Blood and its transfusion is highly regulated worldwide and classified as a drug in India – which can potentially be only produced and sourced from a healthy human being – which means that blood can be made available to the needy only on a purely altruistic nature from a willing blood donor and not produced industrially. Donating, Processing, Testing, Storing and Transfusion of Blood is licensed in India. These processes are licensed and regulated under the Drugs & Cosmetics Rules 1945, falling under the Drugs & Cosmetics Act 1940 duly amended in 1993. The procedures are done at Blood Centres licensed by the respective State Drugs Control Authority and approved by the Drugs Controller General of India.

From the Figure 1, we can understand that there are two basic types of blood donors. They are Voluntary blood donors and Replacement donors. Voluntary blood donors are the basis of a secure and reliable source of blood supply. They are not remunerated and are from the low-risk population. Replacement blood donors as those who donate blood when required by a member of the patient’s family or community.

According to WHO, it is estimated that blood donation by 1% of the population can meet a nation’s most basic requirements for blood, which means India currently needs around 12.8 million units of blood. Figure 2 illustrates the annual blood collection and voluntary donation of blood in our country. From this, it is erudite that the annual blood collection from Government owned collection centres is 6915963 units and from Non-Government is 4729876 units, thus totalling it to 11645839 units. The voluntary blood donation from national blood banks is 5568143 units, and non-governmental blood collection centres are 2810549, thus totalling the same to 8378692 units.

Blood banks in India can be classified into three broadly, based on Ownership – Public/ NGO, Trust, Charitable, based on organisational attachment – attached to hospitals & standalone, and license – Valid - Deemed Renewal. A valid license means that the blood bank has an active license and deemed renewal means that the concerned blood bank has applied for renewal. From the Figure 3 it can be learned that 36% of blood banks are public, including government blood banks and 64% of them are private, including charitable trust blood bank.

STATEMENT OF THE PROBLEM

Blood Transfusion Scenario in India is going through enormous changes. With growing health-care awareness across the country, change in government policies – with focus on health for all schemes, role & investment of private sector corporates in Health Industry growing by around 17% annually. There is also a growing awareness on voluntary blood donation (slated to grow beyond the annual average growth of 5%) which augurs well for the industry.

New concepts and devices are being introduced to optimise and rationalise the use of blood available. New technologies like Apheresis (which propagates donation of just the required components from the donor and returning the other components of blood to the donor thereby optimising the availability of a clinical dose of blood and also enabling the donor to come back and donate again for another needy patient earlier than the mandatory (three months period) and Therapeutic applications related to plasma exchange, red cell exchange, bone marrow cell processing, stem cell therapy etc. expands the range of blood cell applications. Then there are Pathogen reduction technologies recently launched into India by prominent players like Terumo and Macopharma which today gain significance in the light of many viruses like SARS, NIPA & Covid19 which are creating havoc across the globe. The current final frontier is the total or almost total automation of the process in a blood centre, which is reducing the time taken for getting the blood from a donor to a patient by considerable volumes. It would ultimately lead to the concept of total automation where almost all processes in a blood centre would be automated. There are companies who today talk about “Unlocking the Potential of Blood” and “Redefining Blood Banking” which encompasses all the advancements that are taking place in the industry.

Information Technology attains a vital role as well
Table 1: India– Demographic Profile

| Key Indicators                      |       |
|-------------------------------------|-------|
| Population                          | 1.33 billion |
| GDP Per Capita                      | US$ 2015 |
| Healthcare Spending                 | 1.7% of GDP |
| Total Blood Collection              | 11.00Mn |
| Number of Donors per 1000           | 10 |
| Blood collection sites (number)     | 2903 |

Source: National Health Profile Report & NACO

Figure 1: Type of Donation Voluntary Vs Replacement (Source: National AIDS Control Society of India)

Figure 2: Annual Blood Collection & Voluntary Donation (Source:- National AIDS Control Society of India)

Figure 3: Number of Blood Centers in India by Category (Source : National AIDS Control Society of India)

Figure 4: Estimated Market Share by Key Industries in 2017 (Source: Internal Estimates based on industry references)

- with software solutions being integral parts of machines, RFID and Bar-Coding solutions being offered and practised by customers to enable them to function better. Many new types of equipment are run by software’s which provide ease of operations for the customer.

On the Regulatory front, Government is discussing and already drafting long-awaited changes into the Drug Laws. There are talks to take out the Medical Devices and Disposables from the Drugs & Cosmetics Act and to formulate a new regulation exclusively for medical devices. New laws are also being formulated considering making registration mandatory for Medical Equipment & Devices which would then make it mandatory to follow laid down rules and standards for medical devices that are sold into the country. The draft bill has already been circulated for comments to the industry. Quality and safety are now being focused across the Medical Fraternity. Medical Applications that ensure Quality & Safety and improve turnaround times at hospitals, thereby reducing cost are encouraged by authorities and corporates. Haemovigilance is now being introduced, and more and more blood centres are now being encouraged to report near-miss incidents, thereby ensuring focus on the improvement...
of processes and accountability towards products used and end products manufactured. Customers are more quality conscious, accountable for safety and hence choosier.

The industry is witnessing mergers and takeovers. Telemor Corporation took over BCT Cardian (one of the largest apheresis company in the world); Fresenius took over Fenwall, Haemonetics took over Pall Filter Division, Griffols takes over the NAT testing division of Novartis. It has resulted in the consolidation of competition and availability of resources into the industry. (Figure 4) Merger also means the amalgamation of technologies and more interactions across sectors in the future.

All the above changing scenarios call for a re-look from the Marketing Strategy Perspective, which has been practised all along. While the customer remains the most decisive factor in all this, we need to investigate what changes need to be practised from a strategy point of view to this very stand alone and critical business of blood transfusion. There has been negligible, or no study done so far in this regard to this niche industry. Selecting this topic and laying out the variables to take a look at the changes coming through is an effort to reassess and take stock and put up new thought process for review with opinions from a third party expert panel included in the research work.

REVIEW OF LITERATURE

Ulaga and Chacour (2001) conducted a study on the topic Measuring Customer-Perceived Value in Business Markets: A Prerequisite for Marketing Strategy Development and Implementation where they discuss and point out the need to understand the customer perceived value of a product first. Once you assess value perceived by the customer, then it can be easily incorporated to build up a robust marketing strategy for the product, which will ensure that the product gets the value differentiation that it needs. Morgan and Hunt (1999) in their study titled Relationship-Based Competitive Advantage: The Role of Relationship Marketing in Marketing Strategy looks at relationship marketing from the need of adopting Relationship Marketing and as to how these relationships in Marketing are built and maintained. They talk about the fact that relationship marketing should only be adopted when that offers a competitive advantage to a firm. The idea is to finally isolate the resources which aid Relationship marketing and work on them. Huber and McCann (1982) has done a study on the topic “The impact of inferential beliefs on product evaluations”, This study tried to bring forth the influence of inferences on product attributes which the consumers make. The respondents (customers) were given products to be evaluated in which information on one or two attributes was purposefully hidden or removed. Based on this, a business model was generated to evaluate the influence of inferences on the evaluations made on the product. The study showed that inferences are critically important in customer choice measurement. Robbins and Timothy (2009) Robbins, Stephen. Timothy (2009) has conducted a study on the topic Customer perception change in industrial marketing relationships: A call for new strategies and research,” Industrial Marketing Management, the study explains perception as a process by which each individual organises and interprets his or her sensory impressions to give meaning to the environment they perceive. Fernandez-Sanchez Raquel and Bonillo-Iniesta Angeles M (2007) has conducted a study on the topic The Concept of perceived value: a systematic review of research; This study points out consumer perception being an ever-interesting topic of interest to various practitioners of marketing. It also lays out the aspect of multiple meanings, diversity of opinions and difference in the use of terms, creating a possible confusion in the application. What this study does is to do a thorough analysis of the existing literature on the concept called value to try and throw some light on the confusion surrounding the concept as explained above. After studying the different diversions and definitions proposed, convergent and divergent elements affecting are proposed, the features that define the customer value are brought forward, and the framework is proposed for future research in this area. Bowman and Ambrosini (2000) have conducted a study on the topic “perception creation versus value capture: Towards a coherent definition of value in strategy”, This study examines the three facets of value and related valuable resources as to what is value, creator of value and who captures the value concept? The method uses a concept of making a distinction between use-value assessed by customers and exchange value assessed at the point of sale. The gist is that the concept of value is determined by the relationship between the buyer and seller, which is essentially powerful. Mizik et al. (1995) has conducted a study on the topic Developing Relationships in Business Networks. London: Routledge. This study was conducted on industrial products, what happens behind the normal business norms of production, promotion, sales and negotiations and about the ascent and descent of companies in this sector. This study brings forth the aspect of customer perception in this industry sector as well and mentions this as a significant contributor to the
success or failure in this sector as well. Hadjikhani and Mohammad (2008) has conducted a study on the topic The media and consumer perception in a loosely coupled international market system. This study gives us a look at customer perception when it comes under the influence of media, from a negative perspective, rather than a means to support the marketing activities and its influence when a negative media impression creation on one product correlates on a change of perception of customers on other related or non-related products. The network theory is then deployed to study the permanency of perception change and to gather more knowledge at consumer marketing. Chahal and Kumari (2011) in their study Evaluating Customer Relationship Dynamics in Healthcare Sector through indoor patients’ judgment, looked at three different aspects of CRM – customer satisfaction, customer loyalty and service quality concerning the health-care sector. The study goes on to show that CRM is indeed influenced by the studied three-way matrices, by the way, that this paves the way for service quality and customer loyalty improvement which then would result in customer retention for the long term. Olsen et al. (1993) has conducted a study on the topic Influencing Consumers’ perception of Domestic versus Imported Products: Implications for Marketing Based on a Model of Helping Behavior. The study looks at a fascinating side of customer perception in helping campaigns done by companies. The study looked at the scenario where customers buy to support the actual workers who made the products. The study showed that various factors like empathy, the thought that the spent made by the customer is helping the worker and even identifying with the worker’s situation influenced the customer’s perception towards products manufactured indigenously rather than imported into the country. Smart et al. (1996) did a study on – The Effect of Documentation on Customer Perception of Product Quality where they looked at the importance of documenting all factors related to product quality as it captures the essence of customers feedback regarding products and thus forms a concrete basis for improvements in products and also a related marketing strategy. Slater et al. (2010) did a study titled Factors Influencing the Relative Importance of Marketing Strategy Creativity and Marketing Strategy Implementation Effectiveness in which they talk about how the financial performance of a firm is improved when they put together a Creative Marketing Strategy and then go about implementing the same. It talks about identifying the key aspects that determine this, which can then guide the Managers in allocating the necessary resources to implement these strategies across segments successfully. Simms and Trott (2006) in their case study titled “The perceptions of the BMW Mini brand: the importance of historical associations and the development of a model.” This study looked at the aspect of how consumers looked at the BMW brand, its origins in the UK and ownership later shifted to Germany. The study goes on to show that customers retain a loyalty at an emotional level and talks about how BMW looks at its heritage of car manufacturing and its originality component to relate to what the customers in the UK see in them. This will help them retain their continued leadership in one of their most customer supportive markets. Lemmink and Mattsson (2002) “Employee behaviour, feelings of warmth and customer perception in service encounters” did a study to understand the Employee behaviour and its impact on the consumers short term and long term behaviour to the company. The study used two scenarios of a real-time recorded scenario and the other of a stimulated one. The results of the study showed that service is key and a positive experience related helped retain excellent customer perceptions for long and that customers are willing to pay for that positive service experience. Another recommendation of the study was to train the employees on better service offering so that they retain consumer experiences to a longer-term to the benefit of the organisation. Huber et al. (2013) In their study titled “Endorser age and stereotypes: Consequences on brand age” looked at the age types of endorsements and at possibilities of rejuvenating a brand through endorser advertisements. The study investigates the aspect of demographic endorsers and their effect on brand recognition and the individual mental images of brand users. The study ultimately goes on to say that endorsers can be used to rejuvenate a band, taking into consideration the aspect of the strength of the mental image of each brand user. Alba and Marmorstein (1987) The effects of frequency knowledge on consumer decision making this study bring forth the aspect of the negative and positive attributes of a particular brand in determining the consumers choice. It studies the aspect of frequency knowledge and its critical role in decision making, especially when some aspects of the brand have been taken out from the consumers perspective. Shah (2010) Private Sector in Indian Healthcare Delivery: Consumer Perspective and Government Policies to promote the private sector; this study tried to look at the aspect of the role of the private sector in the Indian Healthcare delivery, the way it has evolved and the Governments role in this evolution and the critical com-
ponent of quality of health-care delivered by this sector (essentially from a consumer perspective). The study brings forth some interesting facets which prove that it was not the quality of health care provided that has propelled the growth of the Private sector in India. Barring a few private health-care Corporate sector people, the quality of health-care provided by the private sector seems to be scattered in delivery. Cengiz and Kirkbir (2007) in their study titled Customer Perceived Value: The Development of Multiple Scale Item in Hospitals tried to study the different dimensions related to the aspect of perceived value in health care sector involving valuations of effective & functions aspects. Structural equations model was used to analyses the subject studied, and the results showed that perceived value is found to be multidimensional comprising mainly of service, professionalism, innovation, control and hedonics. The result says that except for the hedonic value, functional, social and effective factors are critical determinants of consumer perception. Wouters (1991) in their study titled Essential National Health Research in Developing Countries: Health-care financing & Quality Care looked at the important relation between Cost & Quality in giving the fine balance to having sustained efficient health-care services – where the patient and the other stakeholders (consumers) are equally satisfied and benefited. It tried to look into aspects where quality was never looked at in terms of importance to patients & on the supply side, the cost of quality aspect. The study goes on to say that further research should be done which will show the way to maximise the benefits at the least cost and prove beneficial to all consumers. Kumari and Chahal (2011) in their study titled, Consumer Perceived Value (CPV) and Consumer Value (CV) in Healthcare Sector talks about the critical factors of Consumer Perceived value and consumer loyalty in the Health-care sector. The study essentially tried to focus on validating this relationship between Perceived value & loyalty by focusing on patients in a couple of hospitals for six months in Northern India. Exploratory & Confirmatory Factor analysis was used to analyse these two. The study showed that CPV is functions of acquisition, gratification, aesthetic & efficiency , while the CV bordered on recommending the same services to others, cost preferences, dissatisfaction response etc. McDougall and Levesque (2000) have done a study on the topic “Customer perception with services: putting perceived value into the equation”. The study looks at the aspect of service and its importance to customer satisfaction indexes. It looks at the relative importance of Core Service quality, perceived service quality and relational service quality. The study went on to say that Core Service Quality and Perceived quality were of greater significance to the consumer as compared to relational quality. Of course, the relative importance of the three drivers would often vary with service. Did a study on Country of Origin, Brand Image perception & Brand Image structure. This study looked at the aspect of the influence of country of origin on the brand perception amongst consumers and its influence. The study was based on an investigation of two brands of electronics of a different reputation amongst consumers in Japan – essentially one product amongst consumers who were culturally different. The study also showed the importance of customised marketing strategies for brands of different repute. Treloar et al. (2001) in the study titled Universal Appeal versus Local Specifications looked at automobile brand image perception across various countries and the possible reason(s) for this across countries. The findings found acceptability amongst the multiple brand image facets related to a consumer’s needs at an international level. The findings also suggested that a brand image might differ across countries relative to their culture and its economic development. Hosain and Leo (2009), in their study “Customer perception on service quality in retail banking in the Middle East: the case of Qatar”, points out the importance of customer service in the face of increased competition in retail banking scenario to satisfy the expectations of customers related to the infrastructure of banks, return on deposits made and the bank timings suiting them. Kondasani and Panda (2015), in their study “Customer perceived service quality, satisfaction and loyalty in Indian private health-care” talks about the importance of adhering to the expectations of customers perception of service and quality so that in turn they enjoy the long term loyalty. Sheth Hiralal (2014), Changing Trends in the Healthcare Sector in India did a study to try and understand the public and private health-care systems in the country, post the economic reforms reference to the raise in the private health-care and the decline in standards of the public sector. This study, in many ways, brings out the avenues for improvements in the highly skilled and reachable public sector, which can reach many more patients across the country. Puranik et al. (2011) in a study titled, A study of Public Perception towards Blood Transfusion, finds out what motivates blood donors to donate blood as a noble cause. The study also tries to encourage public perception towards blood donation, which is one of the most important aspects of a health care set up. Marques et al. (2014) - in their study titled Perceptions about Blood Transfusion: A
Survey of Surgical Patients and their Anesthesiologists and Surgeons talks about taking the perspective of the patient as well in blood transfusion and use this as a method for mutual decision making in the treatment using blood. Shows the aspect of taking the customer’s point of view in this therapeutic method of treatment using blood. McKeever et al. (2006)-in their study on An investigation of the impact of prolonged waiting times on blood donors in Ireland looked at the impact of waiting times for blood donation for donors and the resultant effect on their motivation to come back and donate again in the context of their critical importance of time. It is critical from a customer point of view to ensuring that a donor’s time is utilised to his convenience, so that blood donation becomes a motivating factor for him.

DATA & METHODOLOGY

This study has been conducted with the following objectives in mind a) to assess the current blood transfusion scenario in the country from an industry perspective to understand the current variables that are driving the industry towards the future. b) The study also aims to see whether a radical change in approach is required from a commercial or marketing point of view. This study is Exploratory & Descriptive since it’s based on reviewing available literature or data concerning the topic. This study is based on Secondary Data and has been collected from various journals, publications, unpublished sources and websites. The limitation of the study is that it has been conducted with the information received purely from secondary data.

CURRENT MARKETING STRATEGIES OF KEY COMPANIES IN THE INDIAN BLOOD TRANSFUSION SECTOR

Marketing Strategies gains significance in a highly regulated industry like a transfusion, where the selling techniques are highly personalised. The market is niche - with identified, limited, closed customer groups where there is a heavy focus on processes to prepare and produce clinical products for patients. The focus thus comes on to designing a strategy which revolves around customer’s process requirements which would give the most appropriate end product to the patient. This would then translate into the designing of products or solutions suited to the customer, taking him through the new product and ensuring that he practices a standard procedure to get the best clinical outcome for the patient.

Traditionally the marketing strategies followed in the Indian Transfusion industry by the leading players have been on the clinical efficacy of blood to the end patient. While the leading players like Terumo Penpol, Fresenius and Macopharma consider the following while formulating their strategies.

1. Customer Processes
2. Regulator
3. Clinical Indications
4. Clinician Education
5. Customer Trust or Customer Equity
6. Product Innovation

These companies mostly offer the full range of products, support the customers in upgrading their technology to facilitate their processes to much better serve their end customers (patients) so that they get their clinical outcomes much faster and are cured much quicker. The other players like JMitra, Polymedicure Hindustan Latex focus more on the commercial side of the strategy, i.e. more on a pricing strategy where the trend is to offer the lowest pricing than the others. The tendency then is also to operate in specific market segments predominantly in the government sector (tenders) and the Tier III cities. In these sections, the price factor gains more significance. Newer industry entrants like BL Life Sciences follow the strategy of the market leaders – establish their products in sync with the customer processes. They also try to offer the complete range of products doing a tie-up (Commodat strategy) with other players who provide just the equipment for the blood processing. Technical and Clinical support to the customers to streamline their processes also forms a critical part of the strategy to the leading players.

RE LOOK AT THE MARKETING STRATEGIES

With the constraints on the primary raw material (blood requirement as per WHO norms as mentioned above), it also becomes essential to formulate a strategy then to drive the market which is adding value to the customer’s processes. This would involve educating the clinicians (primary customers of blood from the blood centres) on the importance of prescribing /asking for blood components instead of whole blood and that too specific clinical oriented blood & components, e.g. Leukodepleted, pathogen reduced components) educating on the advantages of particular components of blood and
working with organisations that promote the concept of voluntary blood donations among the common public. The other important variable that needs to be considered in formulating a strategy afresh would involve the regulatory aspect wherein there needs to be a constant interaction with the office of the regulatory authority, DCO, updating them on technological advancements and getting the office to introduce/approve further amendments to the D&C Act 1940 which today forms the binding aspect for transfusion industry in India. Service levels are vital as well to the success of this strategy – primarily because this is a heavily customer-oriented industry with a focus on individual processes and aspects as explained above. Hence service also becomes a crucial component of a marketing strategy.

Commercial strategies need to be re-looked from the talk now needing to shift from cost per product to in terms of the commodity to a much more advanced cost per procedure. E.g. What is the price of a unit of blood in the total cost of surgery (like liver replacement) and how can this be impacted by a technology/process advance. Or how can a process/technology advancement bring down the total cost of the stay for a patient in a hospital and or how can it reduce the turnover time to a hospital per patient? Role of Salespersons is critical in this industry as the selling is based on building up a personal rapport with the blood centres and then offering timely solutions to the customers. The future salesman should be able to explain how technology can ultimately benefit the process improvement and be a saving to the stakeholder. Customer equity factor becomes critical and comes into focus here. Customer equity is looked upon as a newer approach in today’s Marketing and corporate strategy. It helps to create and helps to grow the value of the organisation. This helps in bringing in a long-term customer base which is crucial for the success of any business.

**CONCLUSION**

The study looks upon the need on the effectiveness of existing marketing strategies in the current transfusion scenario, and it indeed brings forward need for a possible need for a re-look and more in-depth research into evolving renewed strategy for the future. For the study ahead (to understand the demand for renewed strategies), it is recommended to take feedback from the blood centres in the country (the primary stakeholders). It is recommended that 20% each from Private, Government, NGO segments of the blood centres (a mix of whole blood and component labs) be selected. On the study, it is therefore highly recommended that current scenario of Blood Transfusion in the country be assessed and a re-look done at the customer perceptions and Marketing Strategies adopted by the leading players in the industry. This would ensure that better and more technologically effective treatment options in blood transfusion are available to the patients of the country and the awareness on blood transfusion is increased many folds in India to reach the levels of those recommended by the WHO. It would also be beneficial to the country to look at optimisation of the blood resources available within the country so that users can be aligned with the demand. I feel strongly that it is important to continue with a holistic study related to the topic considering each area giving due importance. Although certain limitations were met with the study, every effort has been made to make it much comprehensive. Any people who wish to explore more research studies in this area will hopefully find this study beneficial.

**Conflict of Interest**

There are NO financial and non-financial interests and relationships or any conflict of interest with any one concerned.

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**REFERENCES**

Alba, J. W., Marmorstein, H. 1987. The Effects of Frequency Knowledge on Consumer Decision Making. *Journal of Consumer Research*, 14(1):14–14.

Bowman, C., Ambrosini, V. 2000. Value Creation Versus Value Capture: Towards a Coherent Definition of Value in Strategy. *British Journal of Management*, 11(1):1–15.

Cengiz, E., Kirkbir, F. 2007. Customer Perceived Value: The Development of Multiple Scale Item in Hospitals. *Problems & Perspectives in Management*, 5(3):253–258.

Chahal, H., Kumari, N. 2011. Consumer Perceived Value and Consumer Loyalty in the Healthcare Sector. *Journal of Relationship Marketing*, 10(2):88–112.

Fernandez-Sanchez Raquel and Bonillo-Iniesta Angeles M 2007. The Concept of Perceived Value: A systematic review of research. *Marketing Theory*, 7(4):427–451.

Hadjikhani, A., Mohammad, N. S. 2008. The Media and Consumer Perception in a Loosely Coupled
International Market System: The Case of Mad Cow Disease. *Journal of Euromarketing*, 6(4):69–95.

Hossain, M., Leo, S. 2009. Customer perception on service quality in retail banking in Middle East: the case of Qatar. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(4):338–350.

Huber, F., Meyer, F., Vogel, J., Weinrauch, A., Hamprecht, J. 2013. Endorser age and stereotypes: Consequences on brand age. *Journal of Business Research*, 66(2):207–215.

Huber, J., McCann, J. 1982. The Impact of Inferential Beliefs on Product Evaluations. *Journal of Marketing Research*, 19(3):324.

Kondasani, R. K. R., Panda, R. K. 2015. Customer perceived service quality, satisfaction and loyalty in Indian private healthcare. *International Journal of Health Care Quality Assurance*, 28(5):452–467.

Kumari, N., Chahal, H. 2011. Evaluating customer relationship dynamics in healthcare sector through indoor patients’ judgement. *Management Research Review*, 34(6):626–648.

Lemmink, J., Mattsson, J. 2002. Employee behavior: feelings of warmth and customer perception in service encounters. *International Journal of Retail & Distribution Management*, 30(1):18–33.

Marques, M. B., Porterfield, J. R., Vetter, T. R. 2014. Perceptions about Blood Transfusion: A Survey of Surgical Patients and their Anesthesiologists and Surgeons. *Anesthesia & Analgesia*, 118(6):1301–1308.

McDougall, G. H., Levesque, T. 2000. Customer satisfaction with services: Putting perceived value into the equation. *Journal of Services Marketing*, 14(5):392–410.

McKeever, T., Sweeney, M. R., Staines, A. 2006. An investigation of the impact of prolonged waiting times on blood donors in Ireland. *Vox Sanguinis*, 90(2):113–118.

Mizik, J., Hfkansson, I. I., Ivan, S. 1995. Developing Relationships in Business Networks. London. Routledge.

Morgan, R. M., Hunt, S. 1999. Relationship-Based Competitive Advantage. *Journal of Business Research*, 46(3):281–290.

Olsen, J. E., Biswas, A., Granzin, K. L. 1993. Influencing consumers’ selection of domestic versus imported products: Implications for marketing based on a model of helping behavior. *Journal of the Academy of Marketing Science*, 21(4):307–321.

Puranik, V. G., Madhavi, D., Deepika, S., Pallavi, P., Shah, B., Vinaya 2011. A study of Public Perception towards Blood Transfusion. *Bombay Hospital Journal*, 53(1):34–37.

Robbins, S., Timothy 2009. Customer perception change in industrial marketing relationships: A call for new strategies and research, Industrial Marketing Management.

Shah, U. 2010. Private Sector in Indian Healthcare Delivery: Consumer Perspective and Government Policies to promote private Sector. *Information Management and Business Review*, 1(2):79–87.

Sheth Hiralal 2014. Changing Trends in the Healthcare Sector in India Abhinav International Monthly Referrer. *Journal of Research in Management & Technology*, 3(9).

Simms, C. D., Trott, P. 2006. The perceptions of the BMW Mini brand: the importance of historical associations and the development of a model. *Journal of Product & Brand Management*, 15(4):228–238.

Slater, S. F., Hult, G. T. M., Olson, E. M. 2010. Factors influencing the relative importance of marketing strategy creativity and marketing strategy implementation effectiveness. *Industrial Marketing Management*, 39(4):551–559.

Smart, K. L., Madrigal, J. L., Seawright, K. K. 1996. The effect of documentation on customer perception of product quality. *IEEE Transactions on Professional Communication*, 39(3):157–162.

Trelaar, C. J., Hewitson, P. J., Henderson, K. M., Harris, G., Henry, D. A., McGrath, K. M. 2001. Factors influencing the uptake of technologies to minimize perioperative allogeneic blood transfusion: an interview study of national and institutional stakeholders. *Internal Medicine Journal*, 31(4):230–236.

Uлага, W., Chacour; S. 2001. Measuring Customer-Perceived Value in Business Markets. *Industrial Marketing Management*, 30(6):525–540.

Wouters, A. V. 1991. Essential national health research in developing countries: Health-care financing and the quality of care. *International Journal of Health Planning and Management*, 6(4):253–271.