RELATIONSHIP MANAGEMENT IN HEALTH CARE SERVICES SECTOR AFTER PANDEMIC - A STRATEGIC PERSPECTIVE

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Abstract

In the era of covid pandemic health care service sector suffered a lot to meet the needs of patients/customers. This made a challenge for the CRM system to maintain credibility and sustainability among their customer. The study focused on the challenges made by covid pandemic in the CRM system in the health care sector and the application of information technology practices to handle the hurdle during that period. We have undertaken a comprehensive review of the current literature to analyses the consequences of COVID-19 on health care system. Using suitable keywords on the search engines of PubMed, SCOPUS, Google Scholar and Research Gate in the first week of August we gathered information on various aspects of effect of COVID-19 on CRM .The study concluded by the observation that corporate hospitals followed a Customer Relationship Management system in handling out-patient services, in-patient services and emergency care services to reduce patient overcrowding, long ques with the application of ICT and implemented tele-medicine facility, sending personalized SMS to discharged patients and now even using the emerging Artificial Intelligence applications.

Key words:- COVID-19 and CRM, post-pandemic situation, contactless services, Patient Relationship Management, Hospital Information System.

Currently, a new paradigm has appeared in CRM systems as a result of the development of IT and Web service (Anshari M, Almunawar MN.(2011). Relationship marketing in healthcare creates a positive feedback loop for medical businesses and the people they serve.

When healthcare practices put their patients at the center of everything (from communications strategies to medical services), their businesses grow, patients get better, and the entire community benefits. The changes of maintaining

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relationship marketing in tertiary care hospitals after pandemic is a challenging task for service providers in healthcare services sector. The solution is to follow Information and Communication Technologies (ICTs), tele-medicine services, application of Artificial Intelligence tools such as electronic data base management and retrieval system, customer communications via call centers etc. This helps to reduce waiting time, to make good contact with customers/ patients for appointment, hospital and Doctor's reference, consultation and even patient care review, follow-ups etc. to maintain credibility and loyalty among patients to service providers and to hospitals in the post -pandemic situation.

2. Statement of the Problem.

A conceptual study with an attempt to know the impact of Covid pandemic on relationship management practices in healthcare sector and how the challenges were tackled by health care service providers in hospitals.

3. Objectives of the Study

1. To understand the challenges of relationship marketing in healthcare sector after the Covid pandemic.
2. To explore the application ofInformation Technology support in relationship marketing at hospitals to maintain sustainability after Covid-19 pandemicscenario.

4. Scope of the Study

Present time people around the world are panic about epidemic diseases especially Covid, and other viral infections. The healthcare sector was particularly affected by the COVID-19 outbreak regarding products, services, infrastructure, and labor directly involved with the containment of the pandemic and those supporting other health treatments. The people hesitate to go to hospitals to consult Doctors and even availing in - patient services due to fear of infection. In this context the study reveals to overcome such challenges at present and in the future with the support and application of Information and Communication Technology and with proper relationship marketing. The development of the Internet, the World Wide Web and digital technologies such as technology platforms from desktops, laptops, smartphones and tablet devices used by consumers has changed marketing. Patients, convinced that they are consumers of health services and products, are increasingly using the internet or other digital technologies to find the right information, then a more convenient way to select and buy those goods or services. The scope of the study explores the application of hospital information system with the support of Electronic Health Records (EHR) in creating a good relationship management in tertiary care private hospitals and thereby maintains credibility and loyalty among patients to service providers and to hospitals in the post-pandemic situation.

5. Methodology

The study explores the concept of relationship marketing in healthcare sector after pandemic using all the available secondary literature sources from (2019 to 2022) like journals, reports, reference books and websites both in print, electronic and online platform.

6. Literature Study

In light of the COVID-19 pandemic, social distancing measures are practised globally, which include keeping a minimum distance between each other and staying away from crowded places. The health sector is the first to fight an emergency. Digitalization and technology are becoming a vital part of the healthsector. Technological advancements like online doctor consultations, telemedicine, and other pharmaceutical and treatment-related applications play an important role in providing the best health services without direct contact or avoiding overcrowding.

In the context of COVID-19 spread, artificial intelligence and IT related infrastructure can help health experts in many ways. In some regions, mobile applications were introduced to track the COVID-19 situation and collect the location-based data of people suspected to be infected. Also, call centres were established with medical experts to help patients with severe symptoms. Information technology also played an essential role in providing the updated information, training the health experts, and guiding them according to the situation. This can also help monitor service quality, management, and transparency in remote areas. The health sector is the sector most impacted by the pandemic; healthcare personnel are short of PPE and have seen cases of infection. There has been a shortage of both beds and other equipment, including ventilators. Technological advancement plays a role in flattening the spike of the confirmed cases and reducing the flux of the patients toward hospitals. New help line centres eg: DISHA in Kerala were developed. Needed assessment, counselling and guidance were given by expert through telephone and volunteers were arranged to deliver drugs supplies and even food to home. This work method reduced overcrowding in hospitals and helped to tackle the rate of spread of infection.

Dr. Bart Demaerschalk, Director of the Synchronous Services Center for Connected Care of Mayo Clinic, states that "the COVID-19 pandemic has essentially accelerated U.S.digital health by about10years" (Allison Marin, Science. Vo.370, Nov 2020:731-733). Accordingly, digital technology enabled contactless healthcare services have also made a big stride in their developments during the pandemic.

Lee and Lee (2020a) defined contactless service as a "service that is provided without face-to-face encounters between employees and customers through digital technologies." They further presented the enabling technology for contactless service as a form of digital transformation because it made the service paradigm shift possible from personal customer interactions to intangible interactions based on advanced technologies. Contactless services are generally delivered by advanced technologies, such as artificial intelligence (AI), Internet of Things (IoT), virtual reality (VR) and/or augmented reality (AR), big data, and cloud-based platforms (Lee and Lee, 2020a). Thus, different types of contactless services have been developed based on consumers' needs, while providing personalized customer experiencs(Kim et al., 2018; Sweeney

et al., 2015; Verleye, 2015; Lee, 2018, 2019). It is clear that contactless service innovations would not have been possible without advanced technologies (Lee and Lee 2020a). For example, to effectively prevent the spread of COVID-19 in South Korea, the government instituted a quarantine system based on a digital healthcare protocol that included contactless drive-through tests for the first time in the world, requiring cutting-edge technologies. The rapid advances in information and communication technologies (ICTs) enable innovation and diffusion of contactless services worldwide (Lee and Lee, 2020a).

Contactless services during-COVID-19 era

The COVID-19 pandemic has demonstrated the importance of public healthcare and the need for innovative approaches to combat global pandemics. According to a report by WHO (2020a), more than a half of the countries surveyed (53 per cent) were found to have partially or completely discontinued their regular healthcare services for hypertension, diabetes and diabetes-related complications, cancer, and cardiovascular emergencies due to COVID-19. Moreover, the study also showed that nearly 63 per cent of the countries discontinued rehabilitation deeply affected by COVID-19. In addition, during the COVID-19 pandemic, many patients preferred contactless online treatments rather than face-to-face treatments. Accordingly, telemedicine services, which are naturally contactless and widely practiced in the pre-COVID period, have expanded rapidly because they do not require direct interaction between the patient and medical staff (Bestsennyy et al., 2020; Fowkes et al., 2020; Lee and Lee, 2020b).

The rate of telemedicine service utilization, which was around 11 per cent for all patients in the USA before the COVID-19 outbreak, has increased to about 46 per cent during the pandemic, and the use of telemedicine by physicians and healthcare organizations has also expanded by 50–175 times (Bestsennyy et al., 2020). According to Minor and Bevins's (2020) interview with dean of the Stanford University School of Medicine in April 2020 (amid the COVID-19 outbreak), about 73 per cent of all outpatients at Stanford's hospitals were being catered through telehealth visitations. During the month of February 2020 (before the COVID-19 outbreak), about 1000 virtual visits were recorded; compared to 3000 to 3500 visits at a peak day during the COVID-19 outbreak in April. Such telemedicine services can reduce the risk of infection during the spread of an epidemic disease by delivering care through ICT while the patient practices social distancing. Telemedicine also offers other meaningful benefits by alleviating challenging problems in the healthcare industry, such as shortage of healthcare personnel, the increasing number of patients due to aging population, and long waiting times for treatment (Global Market Insights, 2020; Lee and Zafra, 2020; Lovell, 2020; Yoon et al., 2020). In May 2020, James Manyika (Co-Chair and Director of the McKinsey Global Institute) and Kevin Scott (Chief Technology Officer at Microsoft) deliberated on the use of AI in healthcare.

They agreed that AI has been an effective technology in combatting COVID-19 as it can help predict, prevent, and treat COVID-19 cases. They further predicted that AI would play an even greater role in preventing contagious diseases in the future (Manyika and Scott, 2020).

During the COVID-19 pandemic, contactless services have been applied in various fields, such as telemedicine, AI-based healthcare, safety management of patients and staff (ie., through mobile platforms and chatbots), and administrative work (Lee and Lee, 2020b). For example, in South Korea, patients visiting a hospital must fill out a self-checkup questionnaire sent via a mobile app and present it at the time of appointment, and hospitals deliver employee training through video conferencing (Lee and Lee, 2020b). Today, there are various applications of contactless services available for use, such as AI for COVID -19 virus analysis, remote-controlled robots that assist in ensuring that people conform with indoor and outdoor quarantine rules, and robot-assisted disinfection of large areas during quarantine (Lee and Lee 2020, 2020b; Manyika and Scott, 2020). Recently, AITRICS, a Korean AI startup firm, is collaborating with Cleveland Clinic in the USA for deploying VitalCare, AITRICS's AI solutions platform, which can predict diseases such as Sepsis. VitalCare is expected to significantly reduce the mortality rate of patients through real-time monitoring of the patient's conditions (AITRICS, 2020). ICT had already been widely applied in the healthcare industry before the pandemic and has seen accelerated applications in a wide range of healthcare services since the outbreak.

Contactless-based telemedicine services can be characterized by three modalities that connect patients and healthcare providers (Fowkes et al., 2020). First is the remote patient monitoring system, which enables the direct and contactless transmission of a patient's clinical measurements to their healthcare providers? Second is the synchronous consultation system, which facilitates patients' interaction with healthcare providers via real-time phone or audio-video calls using physical equipment (e.g., a smartphone, tablet, or computer) (Centers for Disease Control and Prevention, 2020; Fowkes et al., 2020). Third is the asynchronous consultation system, wherein patient-related data is stored and analysed or addressed at a later time (Fowkes et al., 2020).

The capital size of the global telemedicine market was estimated at US$45.5 billion in 2019 and is expected to reach $175.5 billion by 2026 owing to growth drivers, such as the "rising cases of COVID-19 infections across the globe, increasing prevalence of chronic diseases, a growing number of smartphone users, technological advances related to mobile phones and the Internet, greater need for cost-savings in healthcare delivery, and long waiting time in hospitals for disease treatment in 20263 (Global Market Insights, 2020). Telemedicine services have emerged as an effective healthcare delivery method during the pandemic and this trend is expected to accelerate in the future (Global Market Insights, 2020). To ensure rapid responses to the various mutations

and rapid spread of COVID-19, predictive analysis using big data and AI will become imperative (Bullock et al., 2020; Petropoulos, 2020), making ICT even more essential. Health Cluster (2020) projected that COVID-19 could become another endemic virus, implying that recurrent outbreaks will expand beyond being just a pandemic. Consequently, ICT will see even a greater role in the future for disease treatment, infectious disease prevention and analysis, and managing quarantine activities. Thus, now is the time to explore the directions and expansion of telemedicine services in the post-COVID-19 era. The major goals of this process would be effective disease treatment and prevention, effectual and timely response to the healthcare personnel shortage, and innovative approaches to creating safe healthcare environments. Achieving these goals will help lead to a post-COVID-19 era that is characterized by agile healthcare delivery systems (i.e., online and offline), flexible and expanded use of digital devices in healthcare (i.e., not only in preventing and treating diseases but also in supporting healthcare services), and healthcare services of higher quality with greater user convenience.

7. Limitations of Study

- Research is limited to secondary data only.
- Limited time for collection of secondary data.
- It is not best to check all study data.

8. Discussion and opinion

After reading the literature the researcher finds out some of the major challenges faced during covid 19 pandemic in the health sector and how CRM helped to tackle it effectively.

The first key challenge is the lack of adequate capacity to handle the surging patient volume. In many places, the need for intensive care unit (ICU) beds and ventilators as well as staffing far exceeds the maximum capacity. For the same CRM system helped 'at home patient triage' through redundant data entry, which is eliminated entry of patients who are not in need for emergency care to hospitals and preserved bed for the needy. Streamlining Workflows CRM center was equipped with detailed call scripts and automated workflows. It helped clinicians to direct patients to a suitable care level through evaluating their symptoms and exposure risks. Bar code equipment tracking by the use of a small handheld scanner, care-givers scan barcoded ventilators to record their location. When a patient needs one, doctors access a simple online dashboard that shows the location and status of each one which enabled timely use of equipment and supplies.

A second challenge is the need for real-time redesign of care models for patients. Given the highly contagious nature and severity of the infection, it is necessary for physicians, nurses, and other clinicians to discover the appropriate care model and room design. Hospitals and clinics have to ensure an adequate supply of PPE for their staff. In addition to the risk of contracting the virus, frontline staff has to cope with tremendous mental stress, which some may find unbearable. There have been anecdotal reports of frontline staff dying by suicide. But complete an assessment of patient and staff using screening questionnaire created

by CRM team creating a fast-track detection and isolation of diseased and high-risk category. CRM systems have an important in-built component — secure messaging. This feature allows setting up remote patient triaging with no need for excessive personal visits. This mode of care delivery helps medical staff cope with the increased call volume with no harm to the customer experience.

Another challenge for hospitals and clinics during this pandemic is the financial loss due to the cancellation of elective procedures and the disruption of routine care, particularly for hospitals already in financial difficulty. Lacking sufficient liquid assets could put these health care organizations at risk of bankruptcy. Due to a large number of quarantine patients at home, as well as concerns about the possibility of contacting COVID-19, people have chosen not to visit health care facilities, both clinics and hospitals, resulting in a decrease in the volume and income from prescribing drugs from 2021 until now. To manage capacity, financial loss, and care redesign, health care organizations have made the critical decision to release or reduce workforce or to shift many employees to remote work, including clinicians working with telehealth technologies.

9. Conclusion

After pandemic, healthcare industry is undergoing a paradigm shift from institution-centered care to a citizen-centered care.The findings itself reveals, the recent development of Information and Communication Technology (ICT), especially the internet and its related technologies has become the main driver of the paradigm shift. Managing relationship with customers (patients) is becoming more important in the new paradigm. To an extent, the challenges faced by healthcare industry during Covid pandemic can be managed with utilization of an effective CRM system using practices of call centers, Electronic Health Records (EHR), tele-medicine facilities, application of digital devices, Hospital Information Systems (HIS) and platforms.

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