iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 10 **Issue:** III **Month of publication:** March 2022

DOI: https://doi.org/10.22214/ijraset.2022.40803

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue III Mar 2022- Available at www.ijraset.com

Survey Paper on Mankind Essential – Oxygen

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Abstract: ***The Second wave of COVID'19 Coronavirus has brought a human unexpected condition for demand on Oxygen Supply in all over the world and especially in India. Due to lack of proper channel of getting Oxygen, made people to find the supply of oxygen through social media like phone calls, SMS, WhatsApp message, posting through Facebook, twitter and so many. But only limited people got the right suppliers and many could not get their demand satisfied at the right time. Even hospitals had difficulties during this situation. To face such problems, in this project we propose a unique system for Online Oxygen Management System which can effectively meet the crisis situation in an effective way. To fight the crisis of oxygen shortage in the face of the raging Covid-19 wave, this proposed system is launched as a digital platform to fast-pace the supply chain to both people and hospitals.***

I. INTRODUCTION

Medical oxygen is used by patients in healthcare facilities for life support and for medical treatment. It is necessary to ensure that the medical oxygen supply system

Provide a safe and reliable supply of oxygen to healthcare facilities and patients and end user. Previous experience indicated that the consequence of system failure could be very serious. It is therefore important that both Oxygen Cylinder supplier and healthcare facilities management understand the requirements on the design and installation of medical oxygen Cylinder supply and pipeline distribution system. Particularly, this is common in Asia where the oxygen Cylinder supplier is responsible for the design and installation of medical supply but may or may not be involved in the pipeline distribution system.

II. PROBLEM STATEMENT

Globally, it was very difficult to procure oxygen gas Cylinders for people and the hospitals. As people were not aware of the availability of gas cylinders suppliers and Also supplies were hard to locate. They didn't know about any online platforms from where they could have bought or rent for their families, friends and themselves.

III. LITERATURE SURVEY

A. Supply Chain Management In Health Care: State Of The Art And Potential

Author: *Robbert Huijsman*

Purpose – This paper seeks to focus on the question whether any parallels can be found between the Health care and industrial sector services with respect to the developments that have taken place in the domain of Supply Chain Management. Initiating with an analysis of existing literature, it is intended that different modes of Supply Chain integration will be explained. Also, in doing so, it is expected that the lessons learned from the studies presented in this special issue will be summarized and placed into the perspective of future research that can be considered as necessary.

Design/methodology/approach – This paper present an exploratory, qualitative approach based on the analysis of available literature in the area of Supply Chain Management in Health Services.

Additionally, material from the case studies showcase the special issue is used to assess the current body of knowledge regarding Supply Chain Management in Health Services.

Findings – Starting from a classification of existing research, there were five main research areas with respect to Supply Chain Management in a health care setting are defined.

Also, it is concluded that next to studies with a mono-disciplinary focus, an interdisciplinary focus on Supply Chain Management issues in health services seems to be important. Originality/value – This paper adds to both the supply chain management literature and literature in the area of healthcare management by identifying some important research areas which are linked to both fields. This paper helps both academics and managers to gain a better overview of the complexity of supply chain management in health services.

B. New Trends in Healthcare Supply chain

Author: *Joseph Mathew, Joshin John and Dr. Sushil Kumar*

This paper target on the new trends to optimize costs in healthcare supply chain operations that include virtual centralization of supply chains, supply utilization management practices, use of RFID technologies, use of analytics, streamlining workflow etc. The application of these techniques can provide reasonable healthcare solutions in developing countries.

C. Best Practices in Healthcare Supply Chain Management to Improve the Performance of Healthcare Services

Author*: Megat Ridwan bin Megat Adnan.*

Pharmaceutical and Healthcare supply chain operation is complex to manage. Healthcare service is one of the vital areas in the supply management system where the cost reductions are the predictable outcome. Healthcare supply chain management is the steps of managing, distributing, monitoring product or service in the hospital which handling with suppliers, customers and other channel members. There are many techniques to practice SCM since it was introduced in year 1982, but what is the best way to improve the quality, performance of the healthcare supply chain and at the same time cost efficient but increase value remains a question. In this paper will review the best methods in healthcare supply chain management to enhance the performance of healthcare services by providing the overview of the SCM into definition, problems and challenges, the processes with lean and agile strategies, the role of procurement, logistics and quality management and the improvement in the SCM practices. In each of the topic the additional benefits of SCM practices will be discussed.

D. The Role of Supply Chain Management in Healthcare Service Quality.

Author: *Gutama Kusse Getele; Tieke Li; Jean Tsitaire Arrive*

In sub-Saharan Africa the Healthcare organizations are facing many supply chain management demands that can be addressed through effective operations and management decisions. The objective of this article is to examine supply chain management in healthcare service quality in developing countries, particularly in Ethiopia. This primary method was used to collect data from 384 managers and procurement officers from private healthcare sectors to identify the quality and dimensions of healthcare services. The results of our study depicts that the combination of the timely delivery of health care products, specification, the standard of healthcare product suppliers, and after-sales services in private healthcare sectors in Ethiopia is associated with the quality of healthcare. The aim of this article is focused on the hiring of proper human resources and highly skilled professionals in the supply chain departments to enhance the quality of supply chain healthcare services. As a practical contribution, this article may support healthcare supply chain managers and organizations to do their jobs better or develop some competitive advantage by stating the issues and difficulties related to individual healthcare managers, organizations, and their partners.

E. Risk Management in the Service Supply Chain: Evidence from the Healthcare Sector

Author: *Gutama Kusse Getele; Tieke Li; Jean Tsitaire Arrive*

Service supply chain management is more and more complex and managers find that old-style methods fall short in effectively emphasizing many associated challenges. Despite the risk management in supply chains is continuing to obtain momentous attention in the extant literature, examine the risk aspects connecting to tactical sourcing crossways various industry segments from a transnational viewpoint is scant. The aim of this study is to examine the effect of social ties, institutional support and inter-agency collaboration in mitigating service supply chain risk in the healthcare sectors. Quantitative and qualitative approaches were used to collect data from 171 respondents from Ethiopia. Partial least squares structural equation model is applied to investigate the association among these latent variables and the dependent variable. The outcome of the study indicates inter-agency collaboration plays a critical role in managing service supply chain risk, especially in volatility, uncertainty, complexity, and ambiguity environment. As for practical contributions, outcomes may be helpful to policymakers, managers and organizations to do their jobs better or build competitive advantage by responding the issues and problems related to healthcare individual managers, organizations and their partners.

IV. CONCLUSION

The Advanced Online Oxygen Management system was designed in such a way that future modifications can be done easily. The following conclusion can be implied from the development of the project. Automation of the entire system boost the efficiency.

It offers a friendly graphical user interface which proves to be better when compared to the existing system. It also offers appropriate access to the authorized users depending on their permissions.

It predominately overcomes the delay in communications. Updating of information becomes so easier. System security, data security and reliability are the striking features. The System has suitable scope for modification in future if it is necessary.

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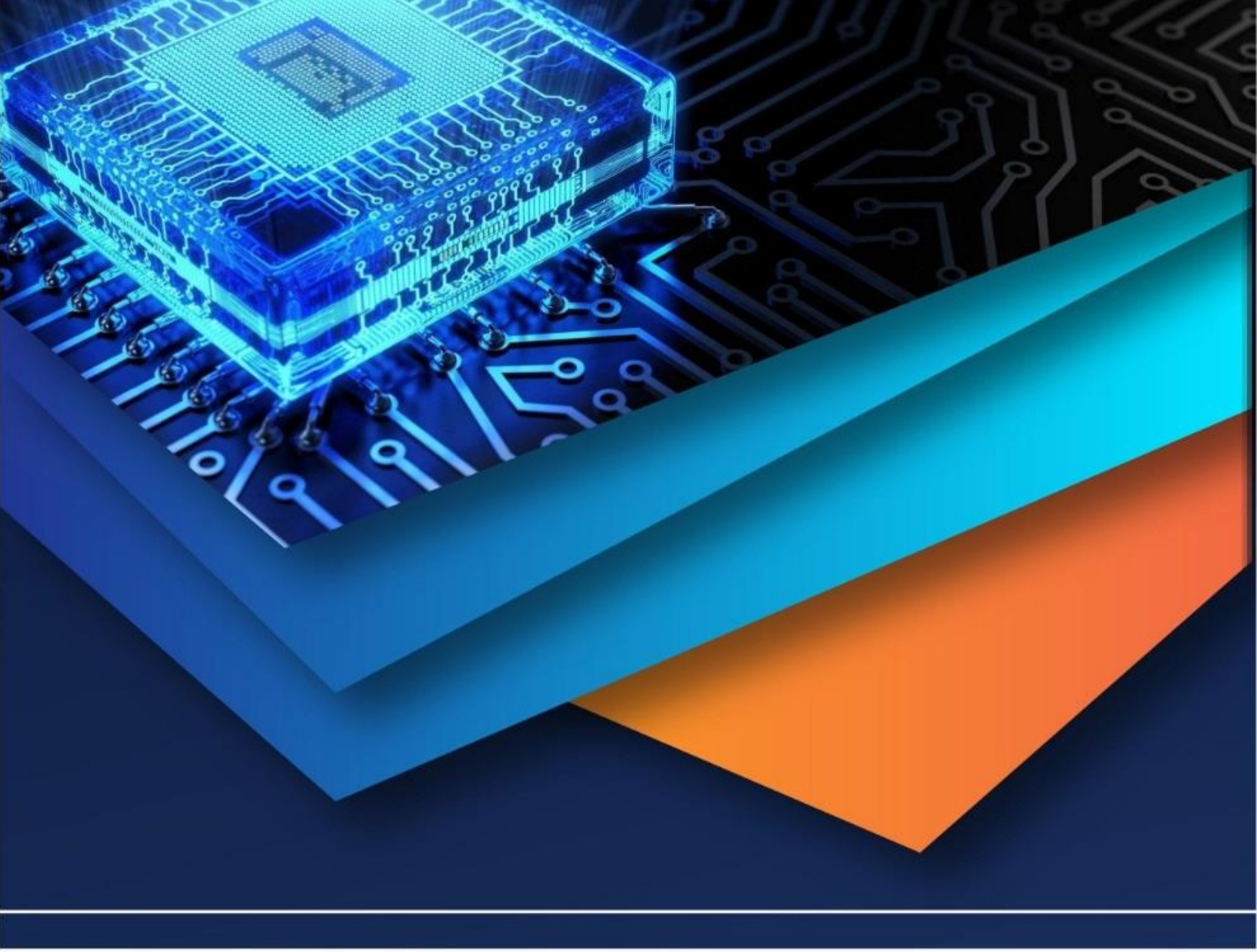

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