



“To understand the sustainability of oxygen supply business during COVID-19 and its impact on general people”

SHAIKH ABDUL RAHIM KALIM UDDIN¹

KHURSHID BHATI²

KHMW COLLEGE OF COMMERCE

RELIEF ROAD, OSHIWARA, JOGESHWARI WEST, MUMBAI 400102, Maharashtra, India

Abstract

During COVID-19 supply of oxygen increased day by day, At the time of pandemic affordable and sustainable access to oxygen Has been growing challenges in India. Indian oxygen supply business/companies private or government were not able to provide sufficient Oxygen to the COVID-19 patients as much as they needed. More than Half a million COVID-19 patients in India estimated to need oxygen Treatment but few of them get because of lack of oxygen supply .After this, Government if India took the initiative and Started Preparations for setting up oxygen plants, so that the Patients of COVID-19 would get oxygen in full measure and they Would be fine.

Keywords

Sustainability of oxygen, supply of oxygen, oxygen needs, lack of oxygen

INTRODUCTION

States across the world went to health related crises set off by the COVID-19 pandemic. Like perhaps a couple countries, India was the second-most jam-packed country, battled for ideal usage of clinical establishments, as clinical oxygen, and others.

Aside from its modern utilization, oxygen is utilized for different clinical purposes - from general medication organization to clinical help and crisis methodology. Oxygen is a basic component for human existence, and due to its regular accessibility through the air, it is some of the time neglected to be a daily existence saving fundamental medication.

The WHO says that 15% of COVID-19 patients require clinical oxygen in view of breathing hardships.

. A few basically sick patients even require a ventilator. Nonetheless, the accessible number of ventilators is excessively low. This compelled clinical stuff creators to quickly go into creation mode.

India confronted a huge fluid clinical oxygen (LMO)

shortage when there was an abrupt surge of Covid-19 emergency and most tainted patients required LMO support. Demands for oxygen chambers overflowed the web-based media. Government associations, NGOs, and private areas immediately leaped to organize LMO for the troubled casualties.

The creation limit of LMO in India is presently at around 7,000-8,000 tons each day. With requests moving toward 9,000-11,000 tons each day, there is a limited deficiency of accessible LMO in the country. A significant part of creation of LMO (around 2,000-2,500 tons each day) happens in hostage units inside huge steel installations that need oxygen to improve the impact heater. At present, 33 steel plants in India supply LMO. Out of the absolute vaporous oxygen delivered by these steel plants, around 5-10 percent can be changed over into LMO that is intended for the wellbeing area.

The LMO is shipped in cryogenic big haulers to the packaging plant where chambers are loaded up with oxygen that then, at that point, can be circulated to the clinics. At times, big haulers from steel plants are straightforwardly shipped off the medical clinic. The place of convergence between the inventory network of LMO and the inventory network of chambers presents the example of a second bottleneck. The bungle between the process duration, and thus the limit, of LMO and chambers brings about requirements that hinder the capacity to address the interest.

When contrasted with the limit deficiency of LMO creation, there is a considerably more noteworthy lack of chambers. Inventories of chambers are running at amazingly low levels (1/fifth of interest days in contrast with LMO stocks). This is especially apparent in level 2 and level 3 urban areas where a few of the packaging units are worked by 'miniature' units in the chaotic area that have extremely less filling limit each day.

Our discussion with experts in this area shows that chamber makers are totally reserved (as far as their creation limit) and import of chambers is being investigated as a choice to satisfy the interest. The shut circle inventory network of chambers is seeing a turnaround of 3 times each month, which should be expanded to 10-15 times each month.

The assignment of LMO to States additionally went about as a bottleneck and might not have thought about the volume of diseases, among numerous others, in the appraisals.

Notwithstanding these bottlenecks, the ground real factors likewise uncovered a deficiency of gifted faculty who could manage LMO to patients.

The UNITED KINGDOM has begun sending ventilators and oxygen concentrator devices. EU people are moreover due to send help.

The public authority has endorsed plans for in excess of 500 oxygen age plants the nation over to support supplies.

The United Kingdom has declared that it will deliver more than "600 bits of fundamental clinical hardware" to assist India with battling COVID-19.

This shipment will incorporate 495 oxygen concentrators

Singapore has give oxygen tanks to India. They have been transported by the Indian Air Force.

Australia has declared that it will send oxygen, ventilators and individual defensive hardware (PPE) units to India as a feature of a prompt help bundle.

Saudi Arabia is transporting 80 metric huge loads of fluid oxygen to India, in participation with the Adani gathering and British global organization Linde.

Need of the study

It has been observed that during the time of pandemic like covid-19 need of oxygen increased, this kind of scenario has never prevailed in world so this study we tried to understand the sustainability of the oxygen supply business During covid-19, as well as know its impact on general people during the time of pandemic.

Objectives of the study

- To understand the importance and sustainability of the oxygen supply business during pandemic like COVID-19.
- To study the impact of oxygen supply on general people.
- To study the demand of healthcare products on general people during COVID-19

HYPOTHESIS

1. **H1:** there is no importance and sustainability of oxygen supply business during COVID-19
2. **H0:** there is an importance and sustainability of oxygen supply business during COVID-19
3. **H1:** there is no impact of oxygen supply on general people.
4. **H0:** there is an impact of oxygen supply on general people
5. **H1:** there is no demand of healthcare products on general people during COVID-19
6. **H0:** there is an demand of healthcare products on general people during COVID-19

RESEARCH METHODOLOGY

DATA COLLECTION METHOD:

The data collection method is one of utmost steps of research. Hence, the data collection method includes using the existing data through questionnaire. In present research the data collection methods are both by bibliotheca and field. In bibliotheca data collection method, the investigation of research literature and other studies is done in libraries and referring to books and articles. In the field of this research the data collection are carried out through questionnaires which are designed for this purpose.

SAMPLE OF THE STUDY

A total of 101 respondents belonging to various age groups were chosen through stratified random Sampling Technique, out of 101 respondents, all 101 were usable data They were contacted online via Google form in Mumbai city. In the pretext the respondents were handed the two questionnaire based on their experiences related to oxygen supply business and its impact on general people.

Primary Data:

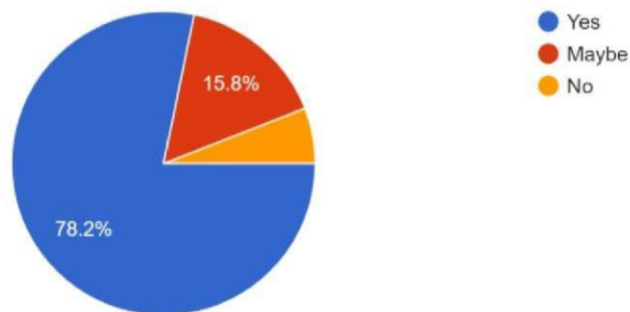
The primary data collected by surveying and filling Google form through divergent audience there were 101 respondents who answered the survey all 101 respondent data was usable the respondent who have experienced in healthcare services have responded effectively and same data was used for data analysis and interpretation.

Secondary Data:

Secondary data is a second-hand data that is already collected and recorded by some researchers for their purpose, and not for the current research problem. It is accessible in the form of data collected from different sources such as government publications, censuses, internal records of the organization, books, journal articles, websites and reports, etc.

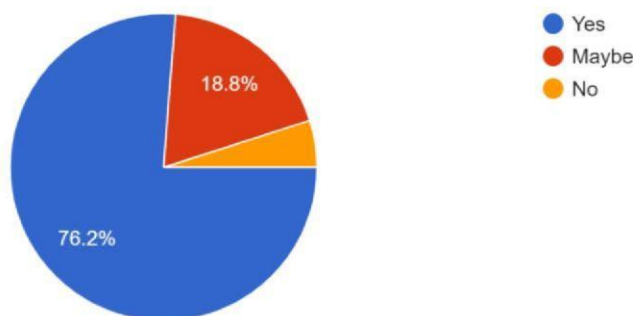
DATA COLLECTION & ANALYSIS

Do you think that there was a importance of oxygen supply during pandemic like COVID-19
101 responses



From the survey we get to know that 78.2% out of 101 responses says that “yes” there was an importance of oxygen supply during covid-19,15.8% says “maybe” and 6% says “no” there was no importance and sustainability of oxygen during covid-19. So we get to know that out of 101 responses some people are strongly agree but some people is might be confuse and some people directly says no there was no importance of oxygen supply business during covid-19.

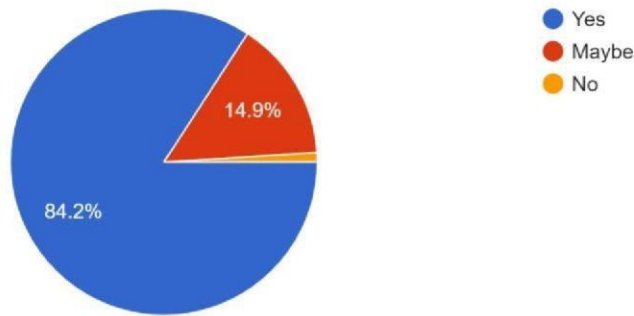
Do You Agree That there is an any impact of oxygen supply on general people.
101 responses



From the survey we get to know that 76.2% out of 101 responses says “yes” there is an impact of oxygen supply on general people during covid-19,18.6% says ”maybe” and 5.2% says “no” there is no impact of oxygen supply on general people during covid-19. So we get to know that most of the people says yes there was an impact of oxygen supply during covid-19 but some peoples are not confirmed that there was an impact or not but 5.2% peoples are saying there was no impact of oxygen supply on people .

There Were A Huge Demand Of Healthcare Products During COVID-19.

101 responses



From the survey we get to know that out of 101 responses says “yes” there is a huge demand of healthcare products during covid-19,14.9% says”maybe”and 0.9% says”no”there is no demand for healthcare products during covid-19. So we get to know that most of the people from the surveys are agree that there was a huge demand of healthcare product but some people are not confirmed about the demand of healthcare products that there is a demand or not but few of them are directly says no there was no demand of health products during covid-19.

TESTING OF HYPOTHESIS

1: According to the 1st question of the survey which contained more than 100+ participants concludes that H1 i.e Null hypothesis gets rejected & H0 i.e alternative hypothesis gets accepted cause 78.2% in the first question said “Yes”

2. According to the 2nd question of the survey which contained more than 100+ participants concludes that H1 i.e Null hypothesis gets rejected & H0 i.e alternative hypothesis gets accepted cause 76.2% in the first question said “Yes”

3. According to the 3rd question of the survey which contained more than 100+ participants concludes that H1 i.e Null hypothesis gets rejected & H0 i.e alternative hypothesis gets accepted cause 84.2% in the first question said “Yes”

FINDINGS & INTERPRETATIONS

The survey conducted the interpretations are as follows:

1. The survey consists of 101 respondents and out of 100% people 78.2% of individuals covid-19 has strongly impacted our daily lifestyle on the basis of oxygen supply / lack of oxygen / healthcare products ETC.
2. The survey consists of 101 respondents and out of 100% people 76.2% of individuals says there was a huge demand for healthcare products during covid- 19. During the pandemic like covid-19 the demand of healthcare products were huge but its supply was low.
3. The survey consists of 101 respondents and out of 100% people 84.2% of individuals says there was an importance and sustainability of oxygen supply business during pandemic like covid-19. Where we were working but our government private companies and other countries took initiatives due to which the oxygen supply was stabilized.

IMPLICATION

During covid-19 in India there was a shortage of oxygen, due to which lots of common people died. After this Indian government, private companies, ngo's took an initiative to set up as many oxygen plants as they can.

- 163 oxygen plants were set up in MP after deficiency of oxygen.
- A sum of 850 oxygen plants are being set up in different locale of the country from PM Cares Fund for obliging the necessities of the country to battle the pandemic COVID-19

CONCLUSION

Oxygen is a very important factor in our life. At the time of pandemic affordable and sustainable access to oxygen has been growing challenges in India. When there was no oxygen supply due to lack of oxygen plants we lost our family friends etc, at that time other countries help us (India) for the oxygen healthcare products and all, and our governments, private companies, ngo's set up the oxygen plants for the corona patients, in the period of pandemic (second wave of covid-19) our government almost set up 850 oxygen plants to cure covid-19 patients.

REFERENCES:

1. G.C. Pimentel., The Hydrogen Bond, W.H. Freeman and Company, New York, (1960).
2. D. Hadzi., Hydrogen Bonding Ed. Hadzi, D., Perman Press, London, (1959).
3. B. Mahl, S.R. Malhotra and Z.S. Kooner., J.Chem. Thermodyn. 14 (1982) 855.
4. I.L. Acevedo, M.A. Postigo and M. Katz., J. Solution Chem. 17 (1988) 977.
5. S. Sharma, C.I.M. Joshi and Jasbir Singh., J.Chem. Thermodyn. 21 (1989) 331.
6. C.R. Schaefer, F. Davolip and M. Katz., J. Sol. Chem. 19 (1990) 289.
7. I.L. Acevedo, E.L. Arancibia and M. Katz., J. Solution Chem. 22(1993) 191.
8. J. Grolier, P.E.G. Roux-Desgranges, M. Berkane and E. Wilhelm., J. Solution Chem. 23 (1994) 153.
9. A. Victoria, Encina Calvo, Ramon Bravo, Mercedes Pintos and Alfredo Amigo., J. Chem. Eng. Data. 39 (1994) 926.
10. T.M. Letcher and U. Domanska., J.Chem. Thermodyn. 26 (1994b) 1241.