



# **SNS COLLEGE OF NURSING**



**Course:** I Year BSc Nursing

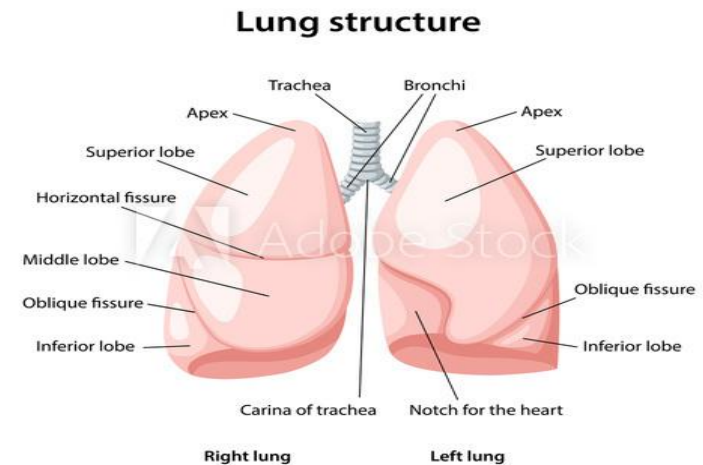
**Subject:** Nursing Foundation

**Unit X:** Meeting needs of patient

**Topic:** Oxygen therapy

# ANATOMY AND PHYSIOLOGY OF LUNGS

- The lungs are roughly cone shaped ,with apex , base, three surfaces and three borders.
- Function is to facilitate gas exchange from the environment into the bloodstream.



# CASE SCENARIO

Old man 60 years reported to the hospital with complaints of **breathing difficulty, fatigue, fever** and the rapid pulse rate. His personal history reveals history of smoking 2 pack of cigarettes per day and on assessment **Spo2 88%**,CT scan of lung shows **ground glass appearance** on lung parenchyma.



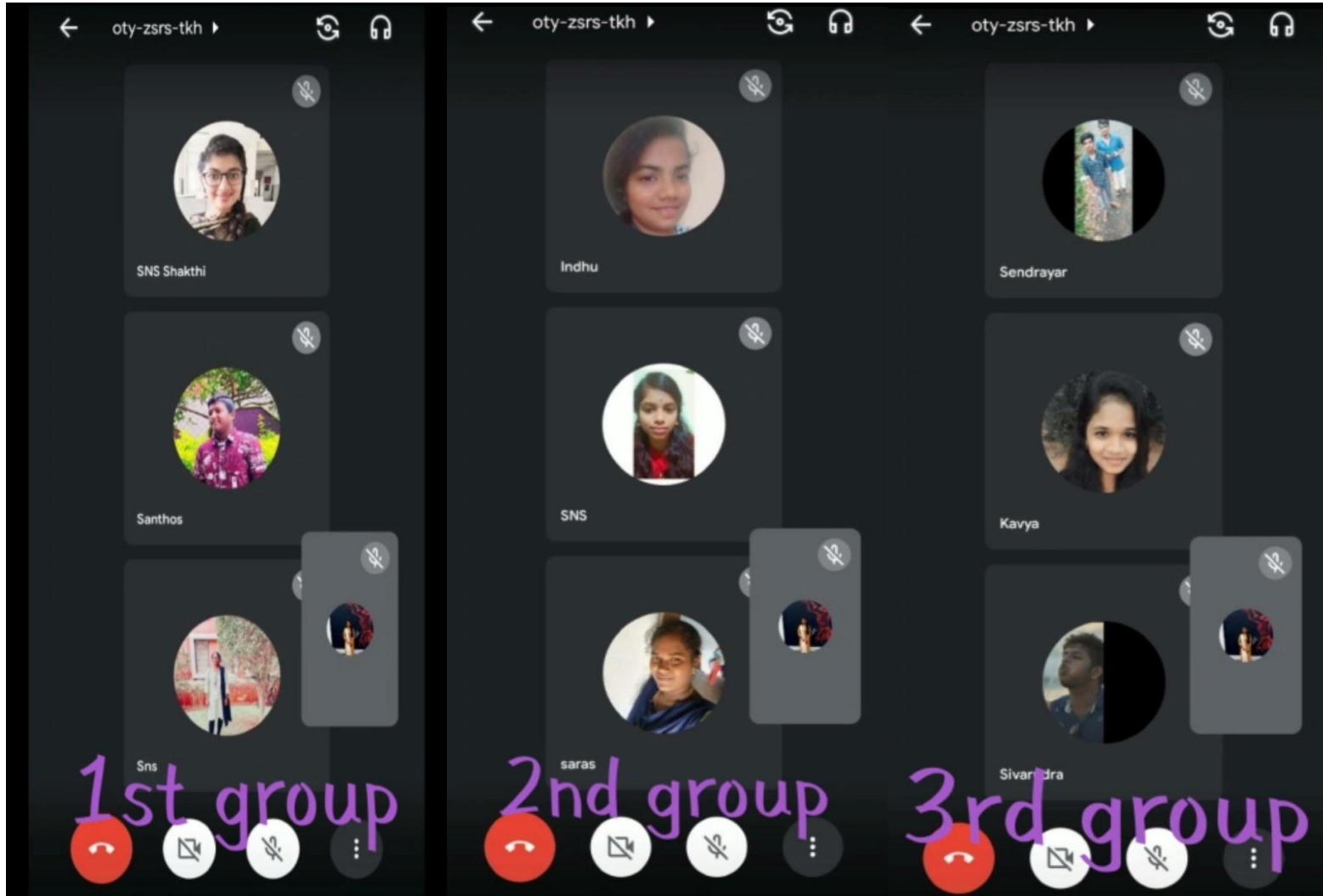


# CRITICAL THINKING QUESTIONS



1. What is the medical diagnosis of the patient?
2. What are the etiological factors of breathing difficulty?
3. What are the interventions can be taken to improve the breathing?

# Group Discussion



# Group Discussion



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# DEFINITION OF OXYGEN THERAPY

- ❑ “Oxygen administration is the process by which supplemented oxygen is administered in high concentration than that of atmospheric air”.

- **Sr. Nancy**



# PURPOSE OF OXYGEN THERAPY

- ❖ To relieve dyspnea.
- ❖ To prevent hypoxemia
- ❖ To increase oxygenation in tissues.





# INDICATIONS OF O<sub>2</sub> THERAPY

Severe respiratory distress (e.g. acute asthma and pneumonia.)

Cardiac failure

Hypoxia and hypoxemia

Acute myocardial infarction

During Anaesthesia for surgery

Shock

Severe trauma

# ASSESSMENT 1

1. Define Oxygen therapy?

Ans.....

2. Enlist the purpose of oxygen therapy?

Ans. ....

3. Explain Indication of oxygen therapy?

Ans. ....

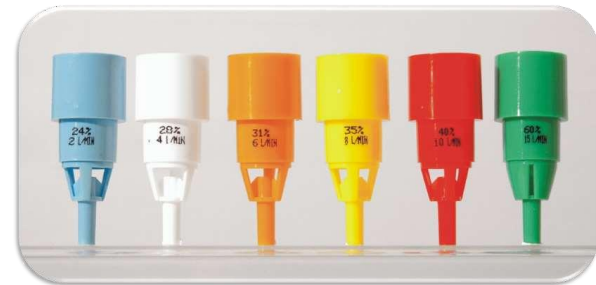


# METHODS OF OXYGEN ADMINISTRATION

## LOW FLOW DEVICES



## HIGH FLOW DEVICES



# NASAL CANNULA

- Used for flow rate of **1-6 L/min**
- Provides oxygen concentration of **24-44%**
- Does not hinder eating, drinking and speaking.
- Considered low-flow.



# FACE MASK

- ❖ Oxygen mask covers the patient's nose and mouth.
- ❖ Person who unable to breathe through the nose.
- ❖ Flow rate **8 to 12 liters.**



# Types

- Simple Face Mask
- Partial Rebreather
- Non Rebreather
- Venturi mask



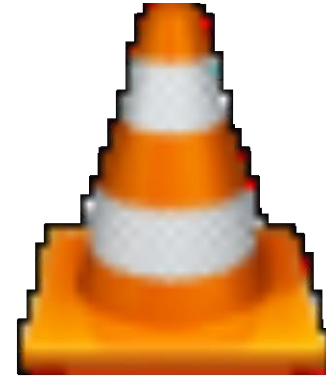
# OXYGEN ADMINISTRATION PROCEDURE

## PRE-PHASE

- Wash hands to prevent infection.
- Explain procedure to the patient .
- Check the respiratory pattern of the patient
- Check the patency of the equipment .
- Arrange all the articles near patient side.



# INTRA-PHASE



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## POST-PHASE

- ✓ Wash hands before removing the oxygen cannula / mask.
- ✓ Keep the patient in comfortable position.
- ✓ Evaluate the patient progress by assessing vital signs and symptoms.
- ✓ Record the procedure with date and time.





# ASSESSMENT 2



1. Enlist the methods of oxygen administration?

Ans. ....

2. Explain the pre procedural interventions of oxygen administration?

Ans. ....

3. What are the parameters to be monitored to wean out from oxygen administration?

Ans. ....



# SUMMARY & CONCLUSION



So far we have discussed on **oxygen therapy** with main headings.

**Oxygen** administration is a common supportive **treatment** for patients with lung diseases and hypoxemia .

**Nurses** are the key person to be part of Oxygen administration.



# ASSIGNMENT



- Write care plan on patient with respiratory problems with oxygen therapy
- Submit on 17.06.2021

## Books :

- Harindarjeet Goyal 2020, '**Textbook of Nursing Foundations for BSc Nursing Students**', CBS publishing company limited, New Delhi, First Edition.
- Nisha Clement **2015**'**Principles and Practice of Nursing- I**', EMMESS Medical Publishers, Bangalore, First edition.
- Sr.Nancy 2014'Stephanie's **Principles and practice of Nursing** 'N.R.Brothers publications, Indore, Sixth edition.

## Online sources:

- <http://www.lungusa.org>
- <https://www.physio.pedia.com>