

## Knowledge and attitudes of mothers towards oxygen administration to their children at Entebbe regional referral hospital, Wakiso District.

### A cross-sectional study.

Monica Alol, Hasifa Nansereko\*, Jane Frank Nalubega, Edith Akankwasa, Elizabeth Okello, David Kavuma, Immaculate Naggulu Posperia

Mildmay Uganda School of Nursing and Midwifery.

### Abstract

#### Background

Oxygen therapy has been an important aspect in clinical practice for more than 20 years. This study aimed to assess the knowledge and attitudes of mothers towards oxygen administration to their children at Entebbe Regional Referral Hospital, Wakiso district.

#### Methods.

A cross-sectional study design was employed, utilizing quantitative approach to data collection through a semi-structured questionnaire. The information was manually tallied, and scientific measures were used to analyze the recorded information. Thereafter, Microsoft Word and Excel programs were employed, followed by presentation in the form of frequency tables, graphs, and figures like pie charts and bar graphs.

#### Results

The majority of the participants were aged 20-29 years, 80% had attained Primary level education and 52% were either unemployed or were housewives, and 38% had between 2-3 children. 70% had no knowledge about Oxygen therapy for children with breathing problems, and 38% felt uncomfortable when their children were receiving oxygen therapy; 70% were concerned about risks when their children were administered oxygen therapy.

#### Conclusion.

The survey revealed that overall, all knowledge and attitudes of mothers towards oxygen administration were inadequate; however, the domains of attitudes towards oxygen administration need to be improved.

#### Recommendations.

MoH and partners should strive to increase the knowledge of mothers about the importance of oxygen therapy.

**Keywords.** Attitudes towards oxygen therapy, Oxygen administration, Pediatric care, Entebbe Regional Referral Hospital

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**Corresponding Author:** Hasifa Nansereko

Email: [haffyhussein65@gmail.com](mailto:haffyhussein65@gmail.com)

Mildmay Uganda School of Nursing and Midwifery

### Background.

Oxygen therapy is a life-saving therapy and has been an important aspect in clinical practice for more than 20 years. It forms part of the first-line treatment used in hospital settings in the management of many life-threatening conditions (Varvinski & Hunt, 2021; WHO, 2017; Howie et al., 2019). The World Health Organization (WHO) enlists oxygen as an essential drug used to treat patients at risk for low tissue oxygenation and low oxygen levels in the blood called hypoxemia, which is life-threatening (Adeniyi et al., 2021). Oxygen therapy improves the quality of life and survival rate in patients with respiratory infections, shock, and respiratory distress (Forum of International Respiratory Societies, 2017; Navuluri et al., 2021). Oxygen should be treated like a drug as it may pose adverse or deleterious effects when administered over a prolonged period or when

delivered in high concentrations (Adeniyi et al., 2021).

In 2018, it was projected that (17%) of hospitalized patients in Great Britain received oxygen on a daily basis (Hale, Gavin & O'Driscoll, 2017), which indicates a high percentage usage of oxygen in the hospital. Similarly, records from the Korle-Bu Teaching Hospital (KBTH) in Ghana also showed that the hospital uses about 600 m3 of cylinder oxygen per month on average, and about 90% of the patients admitted at the Surgical Medical Emergency (SME) ward received some amount of oxygen (Adipa, Aziato, & Zakariah, 2015). Oxygen is considered an important element having both positive biological benefits and toxicity effects. The drug therapy has the potential to cause great harm to patients and even death if administered and managed inappropriately (Poole & Howell, 2018). Under oxygenation

predisposes patients to detrimental effects like death, organ failure and high oxygenation concentration on patients at risk of type 2 respiratory failure, such as patients with chronic obstructive pulmonary disease (COPD), can result in life-threatening hypercapnia (higher than normal levels of carbon dioxide in arterial blood), respiratory acidosis, organ dysfunction, coma and death (Jindal, 2018; O'Driscoll, Howard, & Davison, 2017) as well as Lung tissue damage, reduction of surfactant and alveoli collapse.

Appropriate recognition of oxygen need and efficient administration can have a significant impact on a patient's well-being. Thus, ensuring that oxygen administered was prescribed to cover the oxygen delivery method, oxygen saturation target, and flow rate, duration, and monitoring of treatment and indications for both humidification and weaning of the oxygen therapy was important (O'Driscoll et al., 2017). There was a growing body of evidence concentrating on optimal administration of oxygen therapy, including guidelines, campaigns, and advocacy for safe and effective delivery of oxygen to all patients (Beasley et al., 2015; O'Driscoll et al., 2017). With the involvement of mothers in the administration of oxygen, it is vital for them to have proper information, sufficient knowledge, and practice in accordance with the evidence-based physiological principles and guidelines on oxygen therapy. Uganda is making progress toward attaining Sustainable Development Goals (SDGs). But there were serious deficiencies in terms of education. Access to education has expanded rapidly. Mothers have different levels of education. In light of these issues, the knowledge and attitudes of mothers towards oxygen administration to their children at Entebbe Regional Referral Hospital, Wakiso district, will be studied in this research. This study aimed to identify the knowledge, attitudes, and related gaps among mothers. A child's hospitalization is stressful to parents, and medical procedures such as oxygen administration further elicit parental anxiety and distress. This study aimed to assess the knowledge and attitudes of mothers towards oxygen administration to their children at Entebbe Regional Referral Hospital, Wakiso.

## **Methodology**

### **Study design and rationale**

The study was a descriptive cross-sectional study design that used quantitative methods of data collection. The study design was chosen because it would give the researcher the ability to easily gather information without bias. The design was also chosen because it would offer the researcher an opportunity to probe for more information through explanations of otherwise unclear responses from respondents.

### **Study setting and rationale**

The study was conducted at Entebbe regional referral hospital, located 35km from Kampala, the capital city, along the shores of Lake Victoria Entebbe Municipality in Wakiso district, in the Central region of Uganda. The hospital, being a public regional referral hospital with 200-bed capacity and 181 staff, has different wards. And the study was focused on the pediatric ward. The majority of the population is Baganda and mostly speaks Luganda. Entebbe regional referral hospital was used for this study because it was the most active Health unit in Entebbe municipality and therefore receives a great number of patients, and it enabled the researcher to get the required number of respondents without bias. The research also helped draw measures for any shortcomings in knowledge and attitudes towards oxygen administration to children.

### **Study population**

The study targeted all Ugandan, English-literate mothers aged 15-49 with children who consented to participate in the study.

### **Sample Size Determination**

Estimation of sample size was determined statistically using Taro Yamane 1967, 1986) statistical method below:  $n = \frac{t^2 p}{1+p}$

### **Procedure**

The sample size was selected by a simple random method. The researcher writes "Yes" on 6 small papers and "NO" on the other 6 small papers, mixed all together in a box. She then instructed the mothers to pick only one. Whoever picked a paper with Yes was interviewed; thus, 10 mothers were recruited every day for five days from 8:30 am to 4:30 pm, making a total of 50 respondents.

### **Inclusion Criteria**

Mothers aged 15-49 who attended Entebbe regional referral hospital who can read the questionnaire by themselves, Mothers who gave informed consent to participate in the study.

### **Exclusion criteria**

Mothers who were busy and those who were attending to very sick patients, and mothers who do not speak English.

## Definition of Variables

Independent variables include: Age, education levels, and working experience. Dependent variables: Mother's knowledge and attitudes towards oxygen administration to children below five years at Entebbe regional referral hospital, Wakiso district

## Research Instruments

The researcher used a semi-structured questionnaire, which was adapted from a previous similar study, to collect data from the mothers. This provided the researcher with adequate information in a short time and eliminated bias during data collection. Testing multiple-choice questions were distributed to the mothers during day shifts by the researcher. Each question had one answer, and mothers were free to respond. For multiple choice questions, mothers were required to circle the letter corresponding to the right answer among alternatives and others to fill in, in the relevant box. For more awareness of the form and the content of the questionnaire, a pre-test was organized on a sample of five respondents from each unit not included in the final sample. The research technique and tools were pre-tested in 2 wards in Entebbe regional referral hospital. The pre-test was carried out to ensure clarity of the research questionnaire and the feasibility of the design for eliciting the needed information from respondents. Lessons learnt from the pre-test were used to make the necessary amendments to improve data collection tools.

## Data Collection Procedure

An introductory letter from the school and approved by the Hospital administration visited The school and presented the letter to the relevant departmental in charges introduced herself to the participants. Those who agreed to participate were briefed and asked to provide a written consent by signing or fingerprinting. For those who refused to participate, the interview did not proceed. After obtaining a

written consent, the researcher entered the questionnaire's serial number and the date of the interview. The participants were then required to listen and answer the questionnaires from the first to the last question as the researcher filled them. The data collection process proceeded until every participant was covered. Upon completion, the questionnaires were checked for completeness before leaving the study site and kept by the researcher.

## Data Management

Each answered questionnaire was collected and kept in a safe locker, only accessible to the researcher. Data was entered using Microsoft Access Software by the researcher. Errors were minimized by cleaning and rechecking all data entries with the original data forms. The data was then imported into MS Excel, which was used for coding and validation.

## Data Analysis

The information was manually tallied, and scientific measures were used to analyze the recorded information. Thereafter, the use of Microsoft Word and Excel programming was employed, followed by presentation in the form of frequency tables, pie charts, graphs, and figures.

## Results

### Socio- demographic data of respondents

Table 1: showed that majority 20 (40%) of the mothers who came with children for oxygen therapy were between the age group of 20-29 years of age and the least 6(12%) were 40 years and above, 29 (58%) of the respondents had attained primary education, 3 (6%) of the mothers attained tertiary education. Most, 26 (52%) of the respondents were unemployed or were house wives. 2 (4%) of the participants were students, 19 (38%) were of Catholic faith, 3 (6%) respondents belonged to other religious sects. 32 (65%) of the respondents were married, 2 (4%) respondents were divorced. Majority, 19 (38%) of the respondents had between 2-3 children, 9 (18%) respondents had between 4-5 children.

**Table 1: Shows distribution of Socio-demographic characteristics of the respondents.**

| Characteristics    | Categories          | Frequency (n=50) | Percentage (%) |
|--------------------|---------------------|------------------|----------------|
| Age                | Below 20 years      | 9                | 18             |
|                    | 20-29               | 20               | 40             |
|                    | 30-39               | 15               | 30             |
|                    | 40 years and above  | 6                | 12             |
| Level of Education | No formal education | 11               | 22             |
|                    | Primary level       | 29               | 58             |
|                    | Secondary level     | 7                | 14             |
|                    | Tertiary level      | 3                | 6              |

|                                                                                    |                      |    |    |
|------------------------------------------------------------------------------------|----------------------|----|----|
| Occupation                                                                         | Unemployed/Housewife | 26 | 52 |
|                                                                                    | Self employed        | 13 | 26 |
|                                                                                    | Employed (Formal)    | 5  | 10 |
|                                                                                    | Student              | 2  | 4  |
|                                                                                    | Others               | 4  | 8  |
| Religion                                                                           | Catholic             | 19 | 38 |
|                                                                                    | Protestant           | 8  | 16 |
|                                                                                    | Muslim               | 14 | 28 |
|                                                                                    | Born again           | 6  | 12 |
|                                                                                    | Others               | 3  | 6  |
| Marital status                                                                     | Married              | 32 | 65 |
|                                                                                    | Single               | 6  | 12 |
|                                                                                    | Divorced             | 2  | 4  |
|                                                                                    | Separated            | 10 | 20 |
| Number of children                                                                 | 1                    | 10 | 20 |
|                                                                                    | 2-3                  | 19 | 38 |
|                                                                                    | 4-5                  | 9  | 18 |
|                                                                                    | More than 5          | 12 | 24 |
| Have any of your children ever been admitted to the hospital for breathing problem | Yes                  | 24 | 48 |
|                                                                                    | No                   | 26 | 52 |

### Knowledge on oxygen administration

Figure 1: shows that, most, 35 (70%) of the respondents answered no when asked whether they have ever heard about Oxygen therapy for children with breathing problem. The least, 15 (30%) of the respondents replied yes.

Figure 2: shows that, Majority, 19 (54%) of the respondents first heard about Oxygen therapy from the health workers or hospital and the least, 1 (3%) obtained this information from social media.

Figure 3: indicates that, majority, 28 (56%) of the respondents replied yes when asked whether oxygen therapy is necessary for children with breathing problem and the least, 7 (14%) of the respondents didn't know.

Figure 4: shows majority, 17 (34%) of the respondents said oxygen therapy should be administered during breathing problem. The least of the respondents, 2 (4%) replied other indications.

Figure 5: shows that, when asked whether they knew any risk

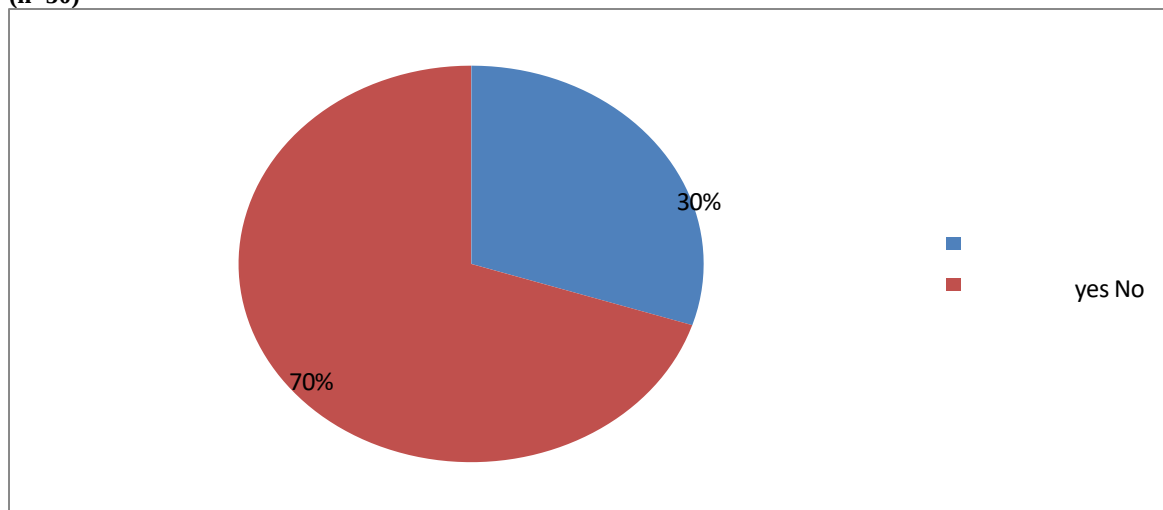
or complication of oxygen therapy, most, 36 (72%) of the respondents said no and the least, 14 (28%) said yes when asked the same question.

Figure 6: shows that, when asked the risk of complications of oxygen therapy known, most, 16 (44%) said dependence on oxygen and the least, 1 (3%) replied others.

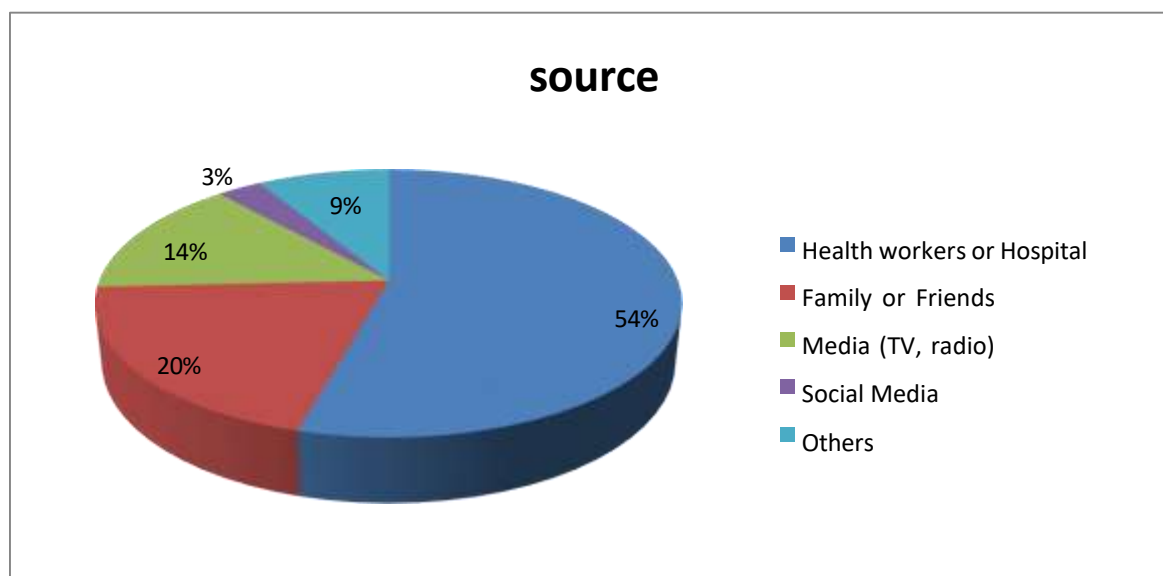
Figure 7, most, 20 (40%) of the respondents said constantly when asked how often oxygen therapy should be monitored when given to a child. The least, 5 (10%) didn't know.

Figure 8: shows that, majority, 35 (70%) of the respondents who were responsible for administering and monitoring oxygen therapy in the hospital were nurses and the least, 2 (4%) were care givers.

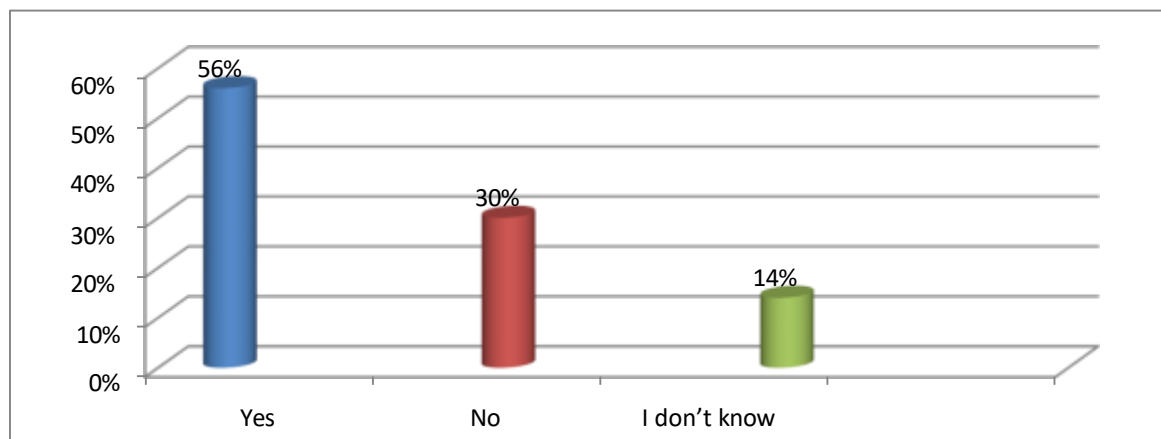
**Figure 1: showing whether respondents have ever heard about Oxygen therapy for children with breathing problem (n=50)**



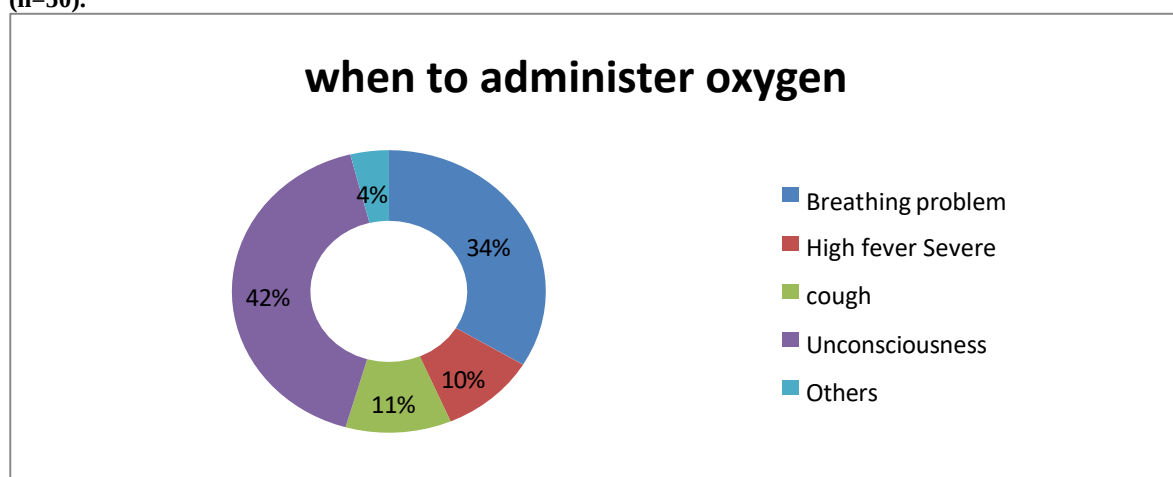
**Figure 2: showing where respondents first heard about Oxygen therapy.**



**Figure 3: showing whether oxygen therapy is necessary for children with breathing problem (n=50)**



**Figure 4: Distribution of respondents according to when oxygen therapy should be administered to a child (n=50).**



**Figure 5: Showing whether respondents knew any risk or complication of oxygen therapy (n=50)**

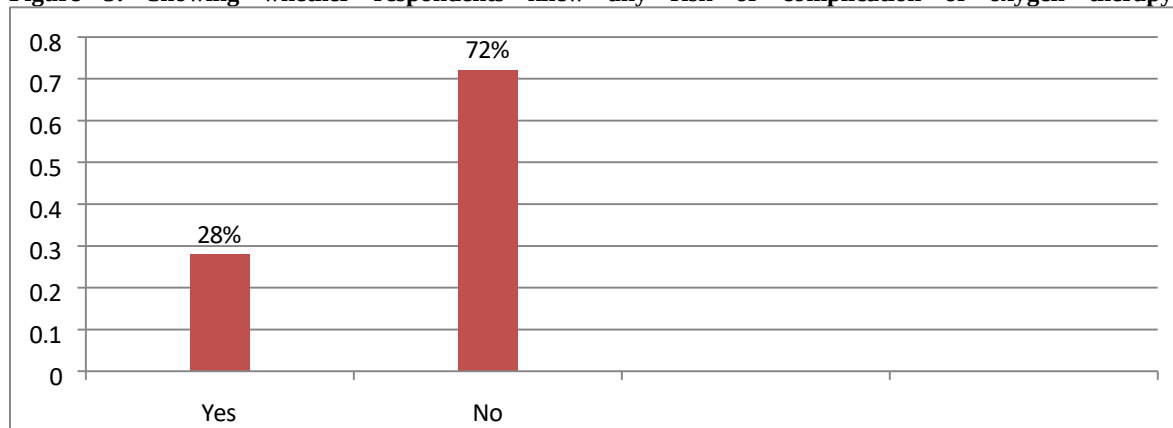


Figure 6: Showing the risk of complications of oxygen therapy known (n=50)

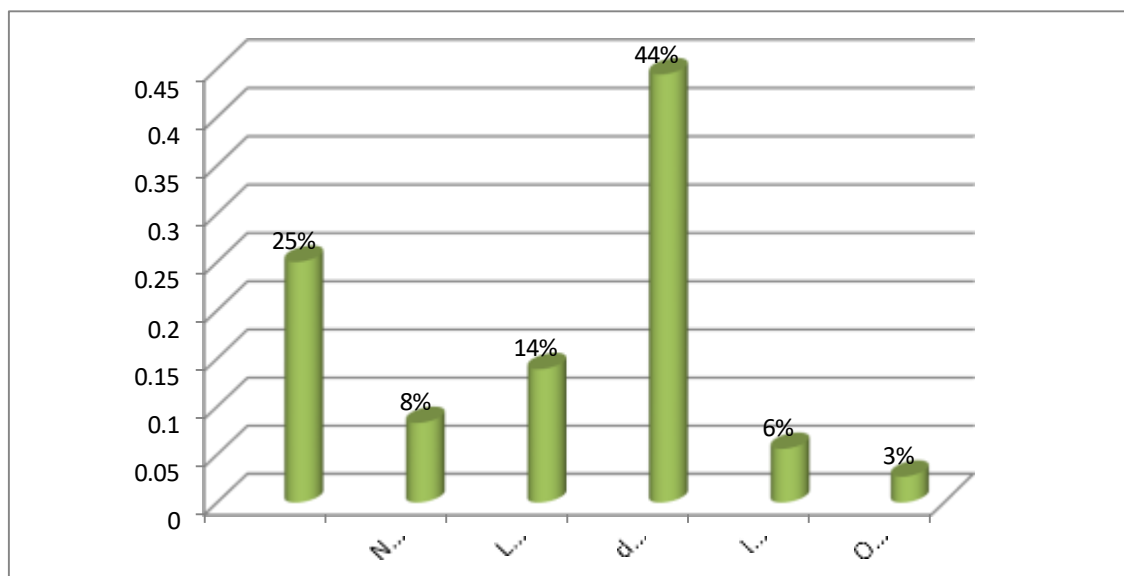


Figure 7: Showing how often oxygen therapy should be monitored when given to a child (n=50)

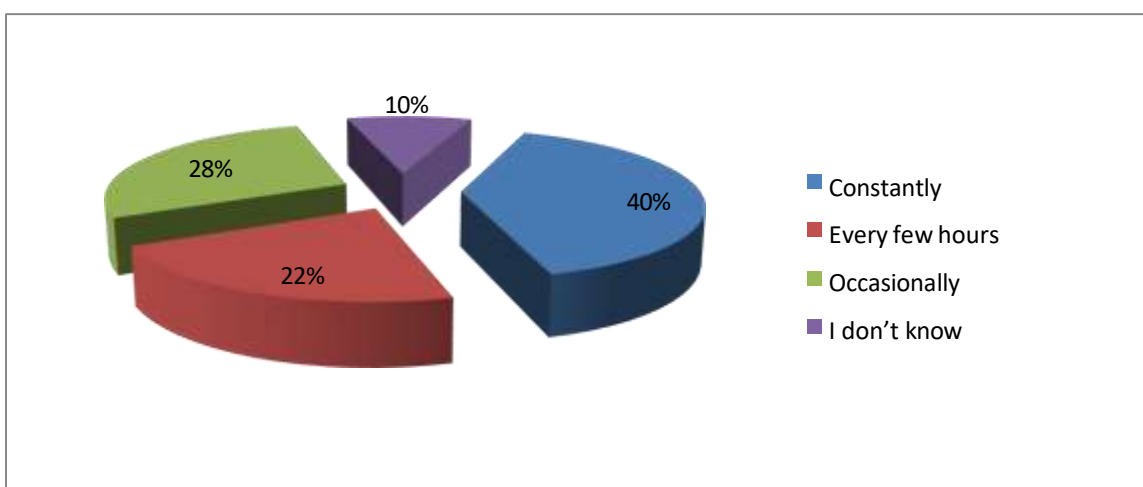


Figure 8: A graph showing who was responsible for administering and monitoring oxygen therapy in the hospital

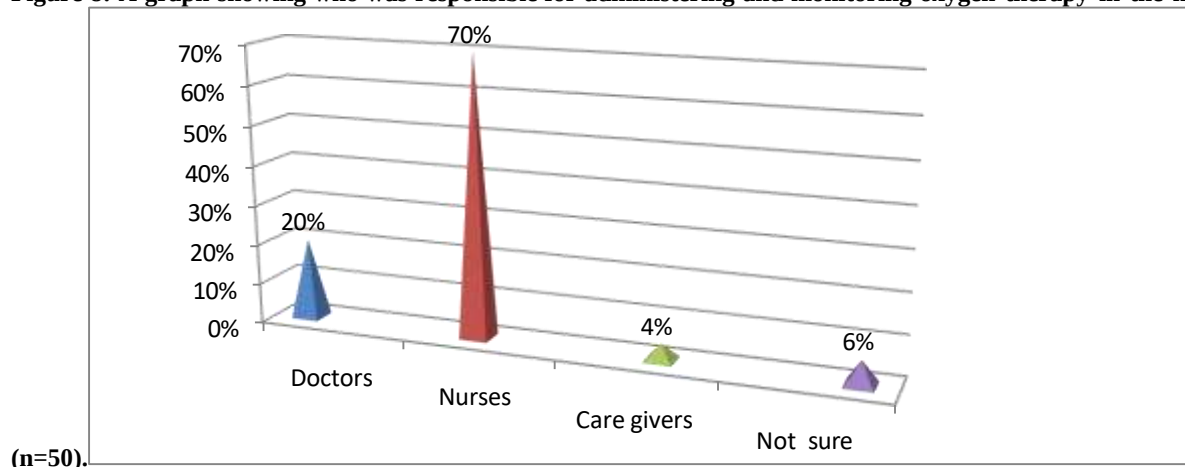


Table 2: Distribution of respondents according to attitudes towards oxygen administration (n=50).

| Characteristics                                                                                                        | Category                  | Frequency (n=50) | Percentage (%) |
|------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------|----------------|
| How comfortable do you feel when your child is receiving oxygen therapy                                                | Very Comfortable          | 8                | 16             |
|                                                                                                                        | Comfortable               | 13               | 26             |
|                                                                                                                        | Neutral                   | 4                | 8              |
|                                                                                                                        | Un Comfortable            | 19               | 38             |
|                                                                                                                        | Very un-Comfortable       | 6                | 12             |
| Do you think oxygen therapy could improve the health of a child with breathing problem?                                | Strongly Agree            | 11               | 22             |
|                                                                                                                        | Agree                     | 21               | 42             |
|                                                                                                                        | Neutral                   | 7                | 14             |
|                                                                                                                        | Disagree                  | 8                | 16             |
|                                                                                                                        | Strongly disagree         | 3                | 6              |
| Are you concerned about any risk when your child is administered to oxygen therapy?                                    | Yes                       | 35               | 70             |
|                                                                                                                        | No                        | 10               | 20             |
|                                                                                                                        | Not sure                  | 5                | 10             |
| If yes, what is your primary concern?                                                                                  | Overdose of oxygen        | 11               | 22             |
|                                                                                                                        | Dependency on oxygen      | 24               | 48             |
|                                                                                                                        | Equipment safety          | 8                | 16             |
|                                                                                                                        | Lack of monitoring proper | 6                | 12             |
|                                                                                                                        | Others                    | 1                | 2              |
| Would you trust health care workers to properly administer oxygen to your child?                                       | Yes                       | 43               | 86             |
|                                                                                                                        | No                        | 4                | 8              |
|                                                                                                                        | Not sure                  | 2                | 4              |
| If your child required oxygen therapy, would you request more information from health care provider about the process? | Yes                       | 27               | 54             |
|                                                                                                                        | No                        | 10               | 20             |
|                                                                                                                        | Not sure                  | 13               | 26             |



|                                                                                                            |                   |    |    |
|------------------------------------------------------------------------------------------------------------|-------------------|----|----|
| Do you believe oxygen should be readily available in all hospital for children with breathing difficulties | Strongly Agree    | 31 | 62 |
|                                                                                                            | Agree             | 15 | 30 |
|                                                                                                            | Neutral           | 1  | 2  |
|                                                                                                            | Disagree          | 2  | 4  |
|                                                                                                            | Strongly disagree | 1  | 2  |

### Attitudes of mothers towards oxygen administration.

Table 2, shows that, majority 19 (38%) of the respondents were uncomfortable when their children were receiving oxygen therapy and the least, 4 (8%) were neutral, majority, 21 (42%) of the respondents agreed to whether oxygen therapy could improve the health of a child with breathing problem and the least, 3 (6%) strongly disagreed, most, 35(70%) of the respondents were concerned about any risks when their children were administered to oxygen therapy. The least, 10 (20%) replied no. And majority, 24 (48%) of

the respondents were worried about dependency on oxygen. The smallest number of the participants, 1 (2%) had other concerns. Majority, 43 (86%) of the respondents said to whether they would trust health care workers to properly administer oxygen to their children. The least, 2 (4%) were not sure. When asked if their children required oxygen therapy, would they request more information from health care provider about the process, most, 27 (54%) said yes and the least, 10 (20%) said no and majority, 31 (62%) of the respondents strongly agreed when asked whether they believed

oxygen should be readily available in all hospitals for children with breathing difficulties and the least, 1 (2%) were both neutral and strongly disagreed.

**Figure 9: Showing whether respondents would recommend oxygen therapy to other mothers whose children have breathing problem (n=50)**

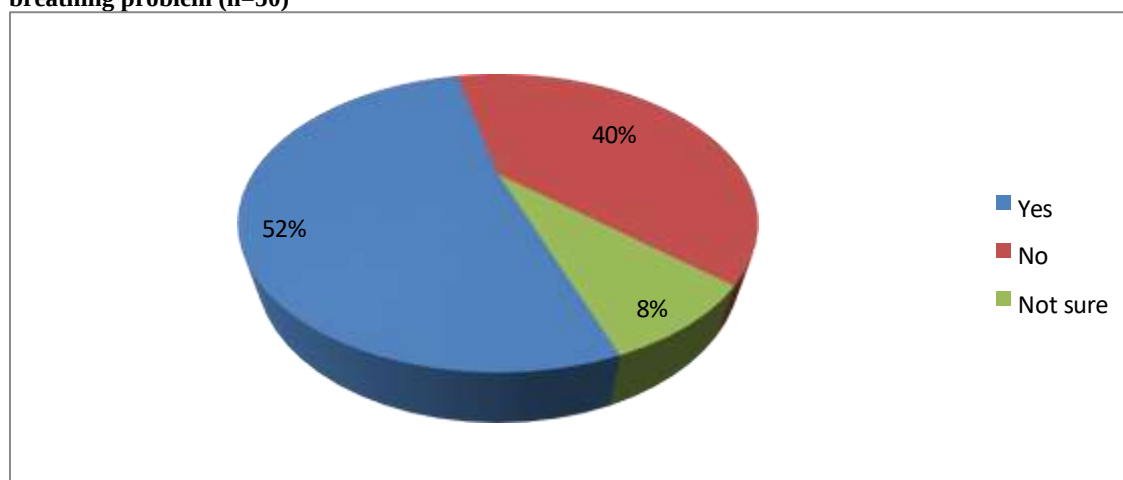


Figure 9: shows that, majority, 26 (52%) of the respondents replied yes when asked whether they would recommend oxygen therapy to other mothers whose children have breathing problems. The least, 4 (8%) were not sure.

### Discussion of Results

#### Knowledge of oxygen administration

When asked whether they had ever heard about Oxygen therapy for children with breathing problems, the findings



indicated that most (70%) of the participants responded no. The least (30%) answered yes. This could be due to the low education of the respondents. The findings, therefore, showed that a small number of mothers had an idea of oxygen that could suggest oxygen therapy to their children. A similar observation was made in previous studies (Goharani et al., 2017), which found a knowledge gap among mothers and caregivers on areas including the indication of oxygen therapy, normal oxygen saturation, oxygen delivery devices, and flow rate.

Regarding where respondents first heard about Oxygen therapy, the biggest number (54%) replied that they had received it from health workers and a few (3%) from social media. This showed how vital health workers are, as they are a source of information for the mothers.

This study is in close agreement with Awel, Bagilkar, and Fekecha's (2019) study on delays in seeking institutional service delivery, among mothers attending Jimma Medical Center, Ethiopia.

The majority (56%) of the respondents replied yes when asked whether oxygen therapy was necessary for children with breathing problems. This was so because they could correctly identify symptoms suggesting a child needs medical treatment for acute respiratory infections, and this showed that mothers had relatively good knowledge of oxygen therapy services. The study also revealed that there was a significant association between the levels of knowledge with education level.

When asked whether they knew any risk or complication of oxygen therapy, most (72%) of the respondents said no, and the least (28%) said yes. This was due to the low educational status of the respondents. And the few who knew the risk of complications of oxygen therapy, 44% thought it was dependence on oxygen for the rest of their lives. Equipment failure, such as empty or disconnected oxygen supplies, or accidental connection to air outlets instead of oxygen outlets, accounted for most of the incidents related to under-use of oxygen (National Patient Safety Agency, 2020).

Regarding those who were responsible for administering and monitoring oxygen therapy in the hospital, the majority (70%) of the respondents said that they were nurses. This was because most procedures were carried out by nurses, and also nurses comprise the majority of the hospital staff and are present in every department. This is similar to a study conducted in Australia, where most nursing staff record oxygen saturation on the saturation monitor and where to record results. (Mahmoud et al., 2016)

## Attitudes towards oxygen administration

According to the findings on the level of mothers' attitude on oxygen therapy, Table 2 indicated un comfortability of respondents when their children were receiving oxygen therapy, as 38% of the respondents were uncomfortable.

This frequency was lower compared to the literature review, where it was stated that oxygen therapy should be administered continuously unless the need has been shown to be associated with specific situations requiring intermittent use only (Saskatoon Health Region, 2019). However, use of oxygen therapy could improve the health of a child with a breathing problem; the study found to have 21(42%) positive attitudes of which agreed by supporting the use of oxygen therapy.

In addition to the study, concern about any risk when oxygen therapy was administered to children, poor perception was noted due to fear of overdose of oxygen, overdependency on oxygen, among others, were the attitudinal factors identified in this study as having a negative influence on oxygen therapy among mothers. In support of these findings, Brown and Lee (2022) had earlier observed in their earlier studies that factors related to the mothers' attitudes take center stage in influencing mothers' intent to use oxygen therapy for their infants. In particular, having a positive perception of the relevance of oxygen therapy creates a positive attitude among mothers.

However, the study showed a positive attitude as regards trusting health care workers to properly administer oxygen to children, as the majority, 86% accepted by saying yes when asked.

This is because of the expertise and experience of healthcare workers in managing different health conditions and handling medical equipment.

From the study findings, 62% of the participants strongly believed oxygen should be readily available in all hospitals for children with breathing difficulties. This influences the knowledge and attitude of mothers in the provision of oxygen therapy. Similarly, studies by previous authors revealed a lack of protocol to prescribe oxygen in the ward, client training, and a shortage of oxygen supply and delivery devices in the various hospitals (Goharani et al., 2017).

## Conclusions

A few of the respondents had a knowledge and attitude gap on oxygen therapy. The most reported errors on oxygen



therapy in this study were that the majority of the respondents did not consider oxygen as a drug, and could not estimate the duration of oxygen cylinder in use. Adherence to evidence-based guidelines helps to achieve optimal blood oxygen levels for all patients and thus reduces the serious adverse effects that are associated with inappropriate under- or over-use of oxygen.

Furthermore, the expensive prices on oxygen delivery devices, which were disposable with no insurance coverage, contributed to the re-usage and / or wrong usage of the devices in the hospital under study.

The hospital was under-resourced in terms of guidelines on oxygen therapy, staff training, logistics, and funds.

### **Recommendations**

In-service units should have periodic retraining on oxygen therapy in the form of training courses and workshops to enhance their attitude and knowledge on oxygen therapy, and also to ensure standard quality.

As oxygen therapy was noted to be very expensive and most hospitals globally have a user-pays health system, health service managers should collaborate with policy makers in ascertaining a financing scheme to make oxygen more affordable.

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My family members for the advice offered during the research period. May the Almighty God reward your efforts.

### **List of abbreviations**

COPD: Chronic Obstructive Pulmonary Disease

CO<sub>2</sub>: Carbon dioxide

COT: Conservative Oxygen Therapy ICU: Intensive care unit

NPSA: National Patient Safety Agency

MoH: Ministry of Health

O<sub>2</sub>: Oxygen

SDG: Sustainable Development Goal

SME: Surgical Medical Emergency

UK: United Kingdom

WHO - World Health Organization

### **Source of funding**

This study was not funded

### **Conflict of interest**

No conflict of interest declared

### **Availability of data**

Data used in this study are available upon request from the corresponding author

### **Author's contribution**

EK designed the study, reviewed literature, cleaned and analyzed data, and drafted the manuscript. JFN and HN supervised all stages of the study from conceptualization of the topic to manuscript writing and submission, and DK & EO supported in study's conceptualization, general supervision, and mentorship

### **Authors biography**

Monica Alol is a student of a diploma in nursing at Mildmay Uganda School of Nursing and Midwifery

Hasifa Nansereko is a research supervisor at Mildmay Uganda School of Nursing and Midwifery.

Jane Frank Nalubega is a research supervisor at Mildmay Uganda

Edith Akankwasa is a research supervisor at Mildmay Uganda

Elizabeth Okello is a research supervisor at Mildmay Uganda

David Kavuma is a research supervisor at Mildmay Uganda.



## Ethical Considerations

The proposal was approved; an introductory letter was obtained from the Principal, Mildmay Uganda School of Nursing and Midwifery, which was presented to the In-Charge of Entebbe Regional Referral Hospital to grant the researcher permission to conduct the research at the unit. The researcher obtained consent from the respondents every day, and the respondents were assured of absolute confidentiality. The respondents did not write their names on the interview guide.

## Informed consent

Written informed consent was sought from all study participants before enrolment into the study after a thorough explanation of the study objectives to them, and they signed. Confidentiality was maintained by the use of identification numbers instead of student names to get more reliable answers from the participants. Data was safely stored in a safe box under lock and key, only accessible by the researcher or research assistant.

## References

1. Adipa, F. E., Aziato, L., & Zakariah, A. N. (2015). Qualitative exploration of nurses' perspectives on clinical oxygen administration in Ghana. *International Journal of Africa Nursing Sciences*, 2, 42–46. <https://doi.org/10.1016/j.ijans.2015.03.002>.
2. Beasley, R., Chien, J., Douglas, J., Eastlake, L., Farah,

- C., King, G.... Walters, H. (2015). Thoracic Society of Australia and New Zealand: Oxygen guidelines for acute oxygen use in adults, (July), 1182–1191. <https://doi.org/10.1111/resp.12620>.
3. O'Driscoll, B. R., Howard, L. S., Earis, J., Mak, V. (2017). BTS guideline for oxygen use in adults in healthcare and emergency settings. *Thorax*, 72(Suppl 1), ii1-ii90.
- Olive, S. (2015). Practical procedures: oxygen therapy. *Nursing Times*, 112(1), 12-14. <https://doi.org/10.1136/thoraxjnl-2016-209729> PMID:28507176
4. Davidson, A.C., Williams, S., Baxter, N., Morris, E., & Restrict, L. (2021). P102 A survey of home oxygen provision across London. *Thorax*, 66(Suppl 4), A108-A109 <https://doi.org/10.1136/thoraxjnl-2011-201054c.102>
5. Goharani, R., Miri, M., Koucheh, M., & Sistanizad, M. (2017). Familiarity of Physicians and Nurses with Different Aspects of Oxygen Therapy; a Brief Report, 5(1), 3–6.
6. Mahmoud, A. H. O., Alseed, H. A. H. F., Awad, H. M. A. A., Ahmed, A. H., & Elhussein, G. E. M. O. (2016). Assessment of knowledge and practice of nursing regarding oxygen therapy in Elmak Nimir University Hospital. *European Journal of Pharmaceutical and Medical Research*, 3(4), 30–35.
7. World Health Organization. (2017). 19<sup>th</sup> WHO Model List of Essential Medicines. 2015. Geneva, Switzerland.
8. Eastwood, G. M., Considine, J., Connell, B. O., & Gardner, A. (2021). Patients' and nurses' perspectives on oxygen therapy: a qualitative study, (June). <https://doi.org/10.1111/j.13652648>.



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