Original Article

Exploring The Knowledge, Attitude, And Practice Of Parents Of Under-Five Children with Otitis Media at the Mampong Municipal Hospital, Ghana

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ABSTRACT

Background: The study assessed the knowledge, attitude, and practice of parents of under-five children on otitis media using the Mampong Municipal Hospital.
Methods: The study used a descriptive qualitative approach. Purposive sampling was used to select 15 participants. The interview guide was employed to gather data and analyze thematically.
Results: Parents were aware of otitis media but called in their local dialect with different names. Parents have information about otitis media through the health care centers. Otitis media is caused by children putting things in their ears, playing together, improper bathing of children, swimming, overcrowding, and corporal punishment. It can affect hearing ability, communication, sleeping, appetite, academic performance, and long-term brain damage. Moreover, parents believed that otitis media could be cured. Parents identified health care services as the best way to treat otitis media.
Conclusion: The study was limited to only patients of Mampong Municipal Hospital, and the qualitative nature of the research did not permit the generalization of the findings. Explore the management practices of parents on otitis media among children.

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Introduction

Otitis media (OM) remains a common condition that sends children to the hospital. It contributes enormously to prescribing antibiotics for childhood ailments in primary health care (Qureishi et al., 2014). The increased use of antibiotics to treat Otitis Media is more evident in developed countries (DeAntonio et al., 2016). Otitis media is an infection of the middle ear that bacteria and viruses

can cause. The most common bacteria isolated in otitis media cases are; Streptococcus pneumonia, Staphylococcus aureus, and Haemophilus influenza.

It can be subdivided into four subcategories based on onset, duration, and presence or absence of discharge. These four groups include; Acute otitis media (AOM), recurrent Acute Otitis media, Otitis media with effusion (OME), and Chronic Suppurative Otitis media (CSOM) (DeAntonio et al., 2016). AOM presents with local and systemic signs and has a rapid onset, and is a leading cause of antibacterial treatment for children in developed countries. OME can occur during the resolution of AOM once the acute inflammation has resolved. However, bacteria may still be present, while CSOM requires ongoing middle ear inflammation leading to otorrhoea persisting for at least two weeks and perforation of the tympanic membrane (DeAntonio et al., 2016).

Although OM can be indicated among all ages, children are known to be more prone to the disease than adults, with the peak age being 6 months to 36 months. This is attributed to the anatomical predisposition of children, in that children are known to have shorter, horizontal, and more flexible Eustachian tubes. Due to the presentation of the Eustachian tube, pathogens enter the middle ear from the nasopharynx with relative ease (Ilechukwu et al., 2014; Qureishi et al., 2014). Also, some factors predispose children to otitis media. These include; parental smoking and exposure to wood smoke, Upper Respiratory Tract Infection (URTI), Daycare schooling, poor breastfeeding practices, familial tendency, overcrowding, cleft palate, immunosuppression, and other childhood diseases such as measles and pertussis (Ilechukwu et al., 2014).

The prevalence of Otitis media in children is relatively high. It has been established that about 50% - 80% of children by the age of 3 years would have experienced at least an episode of OM. The prevalence rate of OM recorded across some sections of countries globally among children under 6 years is 9.2% in Nigeria, 10% in Egypt, 6.7% in China, 9.2% in India, 9.1% in Iran, and 5.1% - 7.8% in Russia (DeAntonio et al., 2016).

Concerning the treatment of OM, Acute OM is thought to be self-limiting within 2 – 14 days of infection (Lieberthal et al., 2013). The United States of America's guideline on the treatment of OM suggests the principle of 'wait and see'. This is to assess the self-limiting nature of the condition before the use of antibiotics. The mortality rate is known to be low (Qureishi et al., 2014). However, its effect and complications can be unpleasant. These include; hearing loss, negative learning ability, and limited scholastic achievement (DeAntonio et al., 2016).

The perception of parents on Otitis media is very influential in the treatment of the disease. Ilechukwu et al. (2014) indicated that an increased risk of complications coupled with poor management could result from late or missed diagnoses. Therefore, to complement the efforts of health personnel, parents' knowledge and perception of the condition is essential. It is of this view that this study is being conducted.

Infants and young children are susceptible to Otitis media, especially Acute OM and OM with effusion. Statistics show that 709 million cases of AOM are recorded yearly, with children under five being victims of more than half (51%). Also, children under 5 years contribute to 22.6% of 31 million cases of Chronic Suppurative OM (Monasta et al., 2012). Despite the significance of figures relating to the condition, limited studies have been conducted in sub-Saharan Africa. Adegbite and Iseh, in a study conducted in Sokoto,

Nigeria 2004, indicated that data on a little over half were reviewed out of 219 Acute Suppurative OM cases recorded in the Otorhinolaryngology clinic.

Consequently, children from 0 – 5 years contributed to most cases assessed (Adegbite & Iseh, 2004). Similar studies conducted earlier focused on chronic suppurative otitis media (WHO, 2004), bacteriology of otitis media in Ghana (Brobby, 1987), bacterial otitis media in sub-Saharan Africa (Tsefa, 2020), socioeconomic challenges of chronic suppurative otitis media (Afolabi, 2014), and rational prescribing of antibiotics in children under 5 years with upper respiratory tract infections in Kintampo municipal hospital (Sumaila, 2015). There is a paucity of empirical evidence on Otitis Media or any related subject on parents' attitudes and preventive practices on Otitis media in Ghana, especially in the Ashanti Region. Therefore, the study sought to explore parents' knowledge of Otitis Media, examine the attitude of parents towards the prevention of Otitis media in their children, and explore the care-seeking practice of parents of Children under five years old with Otitis Media.

Better knowledge of parents' knowledge, attitude, and care-seeking practices on OM among their children would be necessary to adequately assess the need for interventions to reduce its health, social and economic burden. The theory of reasoned action posits that a person's behavior is determined by their intention to execute a particular behavior. It helps show the link between attitudes and behaviors of parents of patients under 5 years old with otitis media disease (Fishbein & Azjen, 1975). Children's health is essential for a country's success in healthcare delivery. Also, children under five years are regarded as one of the most vulnerable groups in health, as they are susceptible to many disease conditions – otitis media is no exception. Therefore, conducting studies to meet the group's healthcare needs is essential. The perception of parents on otitis media and its management would contribute to early health-seeking behavior among parents on childhood infections such as otitis media, thereby reducing the risk of preventable complications. Furthermore, the study would benefit public health facilities, especially in child welfare clinics, where education on otitis media would be in-cooperated with the services rendered to attendants or participants. Stakeholders in health, especially child health and the ENT directorate, in the country would be able to consider the findings of this study in decision and policy-making.

Method

Study Area

The study was conducted at the Ashanti Mampong Government Hospital of the Mampong Municipal Assembly in the Ashanti Region of Ghana, West Africa.

Study Design

The study design for this research work was a qualitative description that has gained popularity among nurses and midwives. Research design provides the glue that holds the research project together. This encompasses the stratified stages employed in the data collection procedures and the steps used to analyze the data gathered. Therefore, the research design summarizes how the survey is conducted right from data collection to the data analysis stage (Sullivan, 2001). It enabled the researcher to give a snapshot of parents' knowledge, attitude, and practice on otitis media. The study employed a descriptive survey of a qualitative approach. Descriptive studies intend to describe or explain relationships among phenomena, situations, and events

as they occur. The major purpose of descriptive research is to provide an overall "picture" of a population or phenomenon by describing situations or events. Therefore, examining parents' knowledge level, attitude, and care-seeking practices on otitis media is appropriate.

Study Population

The population for the study included the parents of children under 5 years. Inclusion criteria were a parent of patients under the age of 5 years diagnosed with Otitis media at the Mampong Municipal Hospital. The parent can be the child's mother, father, or guardian. Exclusion criteria were parents whose child(ren) had been diagnosed with otitis media but older than 5 years. Also, parents of children under 5 years diagnosed with other ear, nose, and throat conditions were excluded from the study.

Sampling Procedure

A purposive sampling was adopted to select 15 participants to form part of the study. It was estimated, and indeed saturation was reached with the 15th participant. A purposive sampling method ensures that parents of children with otitis media infection were selected for the study in order to be able to assist the researcher by providing in-depth information about the subject under study.

Data Collection Instrument and Procedures

Data collection was done through the use interview guide. Participants were interviewed individually using the guide to get in-depth knowledge about the situation. A tape recording of the interview was made. The hospital was visited within the hours of 8:00 am to 1:00 pm when the majority of patients visited the Ear, Nose, and Throat (ENT) clinic. The language used during the interview was mostly Asante Twi, which is widely spoken in the area. However, English was used when needed, and interpreters were employed with dialects the researcher had difficulty with. The data collection lasted two weeks, after which the data was ready for analysis.

Pre-Testing

It must be noted that pre-testing was done at the ENT unit of Agona Government Hospital using five participants. The pre-test area had a similar ENT facility as the study area. Also, it was near the study area. The result of this pre-test helped fine-tune the instrument for actual data collection.

Data Processing and Analysis

Following the procedure for primary data analysis, the qualitative information (interviews) was transcribed verbatim in English with pseudonyms attached to the individual responses from an audio tape and field notes. The transcribed data were double-checked to ensure that all the responses and information given were accurate for all the questions posed to participants. After this, it was subjected to the appropriate analytical model. The transcribed information was analyzed, coded for description and themes, and compared with the information gathered from literature and other sources. Therefore, the data were subjected to content analysis, thus bringing out recurring themes. The themes were coded in addition to the other questions, which did not require content analysis. The results were presented in themes guided by the research objectives. Moreover, direct quotations from participants were used to support the study's findings.

Ethical Clearance

The Mampong Municipal Authority and the Ashanti Regional Ministry of Health granted permission to use the health facility and patients for the study due to

following the procedure for conducting health research in the health facility. The Researchers were tasked to organize an awareness forum to explain all the pros and cons to the participants and obtain written/verbal consent before any participants could be included in the study. Participants were also to be made aware of the "no coercion and no reward clause", ability to withdraw at any time without any suffrages, and no invasion of privacy deception. Local interpreters were available to assist when such problems arose to cater to language barriers. After complying with these requirements, 15 participants who were willing were engaged.

Results

Demographic Information of Participants

Information on the demographic characteristics of the participants was gathered. The demographic information comprised the sex, educational level, marital status, and the number of years of experience of the participants.

Table 1: Background information on the **Respondents**

Variable	Frequency	Percent
Sex		
Male	2	13.3
Female	13	86.7
Age		
30-39 years	5	33.3
40-49 years	8	53.3
50-59 years	2	13.3
Marital status		
Married	8	53.3
Divorced	4	26.6
Co-habiting	3	20
Religious affiliation		
Christians	12	80
Moslem	3	20
Education level		
SHS	9	60
Diploma/HND	4	26.6
Degree	2	13.3

It was found that 13 participants were females, while a few (2) were males. This is a feminine (female-dominated) venture normally supported by females (women). Normally, women care for the children at home and are better positioned to give information about otitis media. On age, 5 participants were found within the age group of 30-39 years, 8 participants were found from 40 to 49 years, and 2 participants were 50-59. Thus, most participants were found below 50 years, thus, from 30 to 49 years. This was the active fertility period.

Regarding marital status, 8 participants were married, 4 of the participants co-habiting, and 3 were divorced. Thus, most participants were married, while a few were divorced. Christians dominated the study, while Muslims were three (3). This is a reflection of the religious affiliation of the populace in the Mampong district. On the educational status of the participants, almost half of the participants have a Diploma/HND education, followed by 4 participants who have SHS education, while a few (2) have a degree. Therefore, the participants were literate and, therefore, able to respond to the demands of the interview guide.

Knowledge of Parents on Otitis Media

Objective one sought to examine the knowledge of parents of children affected with otitis media on "whether they had heard about otitis media", sources of information, the local name given to it, and causes and effects of otitis media, among others. Data gathered shows that most (13) participants had heard about Otitis Media, with only a few (2) voicing out that they had not heard of it. However, participants could explain Otitis Media in the local language. Upon hearing the name in the local language, even those who initially indicated that they had not heard of Otitis Media could describe it. Most of them

knew it as just a problem of the ear, boil in the ear, fluid in the ear, "foie" bad ear, or painful ear. In most local dialects, it is known to the participants as "Aso fit". Even though a significant number (5) had heard of Otitis media for the first time upon taking their children to the hospital for treatment, about half knew about it while in school. These were confirmed in the following excerpts:

> *"Yes, I know about Otitis media. I got to know it when my grandchild complained about his ear pains, and I took him to hospital, and the nurse told me that he has an Otitis media." (55-year-old grandmother – Participant 1)*
>
> *"No, I did not know anything about Otitis media. My child just complained about her ears; I could also see some fluid out of her ears sometimes, so I told my husband about it, and he said we should take her to the hospital. When I arrived, she was examined, and the nurse told me that her middle ear is burst." (41-year-old mother – Participant 5)*
>
> *"Yes, please. My child was coughing and had running nose, and I took him to hospital, but one doctor told me to take him to ENT to examine him and see if it could be an Otitis media." (28-year-old mother – Participant 3)*
>
> *"Yes, I know about Otitis Media when in school because back at Nursing Training College, I learned Ear, Nose, and Throat as a course, and through that, Otitis Media was treated as one of the diseases of the ear."(33-year-old mother – Participant 8).*

Causes and Predisposing Factors of Otitis Media

When asked about the causes of Otitis media, quite a number (9) confused themselves with the predisposing or risk factors. After clarification, they could not make mention of the causes. However, some (3) of those who were health personnel were able to indicate the causes. The causes were mentioned to be infections, bacteria, viruses, and fungi. Almost (14) participants were able to bring out some factors concerning the predisposing factors. A little over a third (6) of the participants believed that putting things, dust, and fingers into the ear could lead to Otitis Media. Others (3) believed that Otitis media is caused by swimming, playing bad games, or water getting into children's ears due to bathing. Running nose, sore throat, coughing, manhandling of the ears or hand, and slapping of children were posited by some (4) participants. Almost (13) all participants believed that overcrowding, especially in preschool classrooms, contributes immensely to Otitis Media in children under five years. The following was what some participants said;

> *"I know that bacteria and viruses can cause Otitis Media, but I am not so sure if fungi can also cause it" (38-year-old father – Participant 2)*
>
> *"Otitis media is caused by children putting things (dust or fingers) in their ears. My child, his brothers reported to me that they saw him putting things in his ears while they were playing. He denied it, but for the subsequent days, I saw some water coming out of his ear, and he could not hear properly when I called him at home. That is when I saw a problem with his ear". (31-*

year-old mother – Participant 4)

"I believed that maybe when I bathe him, some water enters his ear. Also, my child went swimming in some water with his friends and could not sleep that night. When you talk to him, it pains him and makes him feel so bad with noise. So that was the cause of my son's ear problem, Otitis media." (26-year-old mother – Participant 14)

"As for my child, I believe he got it from school because his school was closer to a water body they swim in. In addition, the class was overcrowded, and the school environment was not good. He normally had a high temperature; hence we had to be visiting the hospital frequently. So upon advice from a woman nearby, I withdrew my child from the school, and since then, the frequent sicknesses have reduced. (30-year-old mother – Participant 15)

"I think the disease is caused by dirt. Also, when children start attending preschool, they become diagnosed with Otitis media when they become ill and are taken to the hospital for treatment. I believe that overcrowding in preschool class is a contributing factor" (42-year-old mother – Participant 7)

"Running nose and sore throat can lead to Otitis Media since the ear, nose, and throat have a connection; therefore, infection in the nose and throat can affect the ear."(33-year-old mother – Participant 8)

Effects of otitis media on Children

Questions that sought to assess participants' knowledge of how Otitis Media affects children, taking into consideration the signs, symptoms, and complications, were asked. Almost (14) all the participants could give some signs and symptoms, while quite an appreciable (10) number explained some complications that may result from the disease. It was gathered that fever, pain, excessive crying, loss of appetite, and ear discharge were how Otitis Media affects children. All the participants indicated that Otitis Media could lead to hearing loss, with one further indicating that death and another citing that Meningitis, facial palsy, and abscess can be complications of the disease. On the other hand, most (12) participants alluded that Otitis media can affect children's hearing, communication, and intelligence. Also, a few were able to establish the link between otitis media affecting the brain. The following were some of the responses:

"It affects children in many ways. It can damage their hearing, makes them cry, and cause them to lose their appetite. For my child, he used to cry for minutes continuously without doing anything. He could not eat, sleep, learn, or even play with other people. And I learned from some nurses that it could even damage the brain, especially among parents who do smoke... (32-year-old mother – Participant 10)

"The result of Otitis media can be hearing loss… It can also affect the brain because the middle ear is connected to the

brain, so if there is an infection in the brain, it is likely to affect the brain. Moreover, this can consequently impact the child's intelligence. It can affect their intelligence because when the teacher speaks in class, it would be difficult for the child to hear due to hearing loss. Also, because the child could barely hear properly, I have to shout, and he also does same in an attempt to make each other hear the other during communication" (37-year-old father – Participant 12)

"Lack of sleep due to pain can be one of the effects. I believe that Otitis media can affect some children's academics as they are unable to go to school."(30-year-old mother – Participant 6)
"What I know is that if Otitis Media is left untreated, it can lead to death" (40year old mother – Participant 11)

The attitude of Parents Towards Prevention of Otitis Media in Their Children

Participants could respond to questions assessing their attitudes toward Otitis Media in children. This was based on whether Otitis media was curable or preventable.

Otitis Media Being Curable

Almost all (14) participants except one alluded that Otitis media is curable. Their views were based on their experience when their children were down with the disease. Some of the participants shared their views as follows;

"Yes, I believe that Otitis media is curable because when I took my child to the hospital, and she was diagnosed of it, in about three days, my child was up and about feeling good after treatment" (34-year-old mother – Participant 13)

"Yes, it is curable because after my child had been treated, there has not been any incidence again."(30-year-old mother – Participant 6)

"Yes, it is curable because it is caused by infection; therefore, with the right antibiotics, it can be cured. However, complications can make that difficult." (38-year-old father – Participant 2)

"I do not think so. My husband believed it was a spiritual issue, not a normal sickness, so we took our child to the northern region for herbal medicine. I have been to many places in the northern region and applied different herbs, but I did not see any difference in the healing of my daughter. Even my husband told me it is a spiritual sickness, so I do not worry myself with drugs." (27-year-old mother – Participant 9)

Prevention

Among the participants for the study, 13 of the participants believed that otitis media could be prevented, while a participant was not sure that it could be prevented and had no idea whether it could be prevented. Among the 13 participants who believed that otitis media could be prevented, the predominant preventive factors were reducing the class population for pre-schoolers, ensuring proper hand hygiene, and avoiding inserting or putting things into the ear. A few (3) believed that otitis media could be prevented when children are taken to the hospital early. Other

factors that came up also were stopping swimming and early treatment of related conditions such as sore throat and common cold. Comments passed by participants include;

> *"Early treatment of cold and sore throat, avoiding cold drinks and putting hands in the ears can prevent Otitis Media". (28-year-old mother – Participant 3)*

> *"The nurse told me that I should avoid water from getting into the ear to prevent recurrent Otitis Media. I also think that trimming down overgrown nails can contribute to otitis media prevention" (30-year-old mother – Participant 15)*

> *"Schools should ensure that classrooms of pre-schoolers should be decongested to reduce infections; by so doing, children will be free from Otitis Media. Through this knowledge, I went to my ward's school to advise them on the overcrowding of the children." (37-year-old male father – Participant 12)*

Care Seeking Practice of Parents on Otitis Media

This objective assessed how parents seek health care when their children have Otitis Media. It centered on where participants took their children when they were down with the disease, home management, and their satisfaction with hospital treatment. Also, participants were allowed to advise their fellow parents on health-seeking practices relating to Otitis Media.

Place of Reporting Infections and Home Management

Views shared by participants revealed that most (13) of them reported to the hospital when their children had infections such as Otitis Media, while 2 of the participants got drugs from over the counter. That notwithstanding, many of them also mentioned resorting to herbal medication (2) and over-the-counter medications (5) to treat their children's ailments. Also, in responding to the place of reporting infections, participants shared how they managed Otitis media among their children. Though about a third of the participants barely did anything to their children before reporting them to the hospital, a number (7) of them gave medications, including herbal treatment, before taking their wards to the hospital. Antipyretics, especially paracetamol, were mostly used at home to bring down temperatures and pain, while a few (3) used antibiotics. Some tepid sponged their children at home. These were what participants had to say;

> *"I reported to the hospital after I had tepid sponged and given syrup Paracetamol and Amoxiclav. I did these in the house because my child was complaining of pain in the ear. I have these medications in the house, but upon giving them, the symptoms were still persisting." (33-year-old mother – Participant 8)*

> *"My wife told me that it was a boil in my child's ear, so we went to drug store and bought a spirit ear drop, though someone had advised us of using herbal preparations. Upon further deliberations, I decided to report my child to the hospital and do away with the spirit ear drop altogether. So no medication was used before reporting to the*

hospital. (37-year-old father – Participant 12)

"When my child took ill with complaints of ear pains, I took him to my village where my mother proposed herbal treatment. After some days of treatment, there was no improvement, so I gave syrup paracetamol to bring down the fever and later sent him to the hospital." (34-year-old mother – Participant 13)

"I treated my child with 'Maame Dagomba' as suggested by my mother, and within 3 days, the boil in the ear burst. However, after the ear was discharged, I took my child to the hospital. (31-year-old mother – Participant 4)

Satisfaction with the Hospital Care and Best Treatment for Otitis Media

It is worth saying that all participants alluded that the care rendered to them at the hospital was satisfactory, with some being very enthused when describing their experience. They all indicated that their responses were not influenced by the fact that they were being reviewed by a nurse or at the hospital.

Again, all participants agreed, except for one who was shy to answer and opined that the best treatment for otitis media was reporting to the hospital for specialist care.

Some of the comments indicated included;

"I was very satisfied with the treatment given me at the hospital because my grandchild could eat again within a few days – the medications were good. The best treatment for otitis media is to send your child to the hospital… it is not because I am in the hospital because, but from the way my child is doing well, no one has persuaded me into saying something different" (55-year-old grandmother – Participant 1)

"I was very satisfied because the ENT nurse gave me some free medications, which I thank her for. I believe that the best treatment is to adhere to preventive measures and seek early treatment since not all fevers result from Malaria" (38-year-old father – Participant 2)

Advice to Other Parents

Participants were advised to buttress their reasons for seeking hospital care for their children with Otitis Media. These included;

"Based on my experience, I would advise them that whenever their ward is complaining of anything, they should seek expert advice" (37-year-old father – Participant 12)

"In my village, the best swimmer award is given to the one who has been able to get his or her discharging through swimming. Therefore, I will advise them to seek hospital treatment whenever they experience any ear problem when swimming."(32-year-old mother – Participant 10)

"I will advise any parent who seeks my opinion on a condition like this to report at the hospital, and I will use mine as an example" (40-year-old mother – Participant 11)

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Discussion

Knowledge of Parents

Knowledge about a subject is very paramount in decision-making. In this instance, knowledge of Otitis media influences the early identification of symptoms and subsequently seeking treatment. The study revealed that participants had appreciable knowledge of the condition, though

many confused ear pain as synonymous with Otitis Media. It can be deduced that the knowledge displayed was partly due to the participant's education level and previous experience with Otitis Media. This assertion follows a study by Alharbi et al (2019), who attributed parents' knowledge of Otitis Media to their higher education level and economic status.

Despite the appreciable knowledge of parents in this study, only a handful could correctly state the causes of Otitis media as bacteria and viruses, as IIechukwu et al. (2014) outlined. This was similar to a study by Hansen, Howlett, and Hoffman (2015), who asserted that parents did not accurately understand the causes of Acute Otitis Media.

That notwithstanding, though confused with the causes of OM, participants were able to mention a good number of the risk factor of OM. These included; running nose, sore throat, coughing, manhandling of the ears or hand slapping of children, putting things, dust, and fingers into the ear, swimming, playing bad games, and water getting into children's ears as a result of bathing. Participants in Malene et al. (2015) study mentioned most of the factors indicated in the study. These risk factors are confirmed in the article by IIechukwu et al. (2014).

Parents in this study could identify the classical signs and symptoms, including otalgia, fever, hearing impairment, and otorrhea (IIechukwu et al., 2014). This study continued to reveal how OM affects children's intelligence, which included absence from school and difficulty understanding what is being taught due to hearing impairment. Malene et al. (2015) also indicated cognitive development of children could be affected due to hearing impairment.

The attitude of Parents Towards Prevention of Otitis Media in Their Children

Parents' attitudes were assessed through their responses to whether Otitis media is curable and preventable. The study revealed that participants agreed that Otitis media was curable because if early treatment is sought, children will recover from the disease within a few days. This assertion makes parents optimistic that once they report to the hospital, particularly the ENT department, they are assured of early recovery and cure of their children from Otitis media.

Participants mentioned several preventive measures, including reducing the preschool class population, ensuring proper hand hygiene, avoiding inserting or putting things into the ear, stopping swimming, and early treating related conditions such as sore throat and the common cold. Their knowledge of the preventive measures will help them develop a positive attitude toward preventing the disease. Khalid et al. (2017) research on knowledge, attitude, and practices towards otitis media in Saudi Arabia found that parents' poor knowledge of otitis media resulted in poor attitudes towards otitis media. The theory of reasoned action proposes that positive or negative attitudes influence the parents' behavior or knowledge regarding otitis media treatment and prevention.

Care-seeking Practices of Parents

The knowledge of a person about a condition can influence care-seeking

practices. The study showed that most parents (13) seek healthcare for their children with OM at the hospital. However, home management is undertaken before children are sent to the hospital. Most participants sought to reduce fevers and pain with paracetamol before taking their children to the hospital. Some went to the extent of giving some antibiotics, such as Amoxiclav. They have these medications from over-the-counter. This finding contradicts a study by Shaheen et al. (2012) in which a high education level was responsible for reporting to the hospital without any intervention. In this study, though participants have higher educational levels, almost half (7) made interventions before reporting at the hospital. This can be attributed to the fact that these participants had a health background; thus, they might be nurses, general practitioners, or other hospital workers. Notably, a third of participants provided no intervention before taking their children to the hospital. Yiengprugsawan, Hogan, and Stazdins (2013) also buttress that most parents consult general practitioners to diagnose OM.

It was again realized from the findings that parents who resorted to herbal treatment before reporting to the hospital were advised by their people with no health background. This means that people in the community can affect the health-seeking behavior of others. One revealing response that participants did not clearly understand, considering the answers they provided, was the best treatment for Otitis Media. Almost all participants believed that the best treatment for OM was early reporting at the hospital. However, according to (Ilechukwu et al., 2014), 5 – 7 days for uncomplicated AOM antibiotics were ideal. Kaitesi, Peter, and Debara (2014) argued that some parents are aware of the management of OM while others are not.

Conclusion

Parents were aware of otitis media but called it in their local dialect with different names. Parents have information about otitis media through the health care centers. They believed it was caused by children putting things in their ears, playing together, improper bathing of children, swimming, overcrowding, and corporal punishment, among others. Also, they believed it could affect hearing ability, communication, sleeping, appetite, and academic performance, damaging the brain for a long time. Also, parents believed that otitis media could be cured. However, they believed it should be reported early and at the health care center rather than herbal centers or using the drug store. Parents identified health care services as the best way to treat otitis media. To them, otitis media can also be prevented through careful examination of children, reporting early to the health care centers if found any signs or symptoms of otitis media are present, reducing overcrowding at home and in school, bathing children well, making sure children do not put things into their ears as well as taking good care of them while punishing them.

Based on the findings, the study entreats that the healthcare centers, in collaboration with District Health Directorate, should organize frequent education for nursing parents and antenatal attendants on otitis media, symptoms, and preventive measures. Also, in collaboration with the various District Health Directorates, the Ministry of Health should educate parents on otitis media since almost one-third of the parents were

unaware of it. Lastly, parents and school management should ensure that pupils or children are free from dust and other small materials that can be inserted into their ears. Also, parents and teachers should care much about children, especially during their playing time with other children.

The study explored parents' attitudes and behavior regarding the identification, treatment, and prevention of otitis media. The qualitative nature of the study helped to inquire about how parents manage otitis media among patients under five (5) years. Moreover, the study could not determine the kind of attitude contributing to good or poor treatment or prevention of otitis media among patients.

The datasets used and analyzed during the current study are available from the corresponding author upon reasonable request, but for confidentiality's sake, numbers (syndrome) are used in place of participants' real names. All data generated or analyzed during this study are included in this published article.

Authors Contributions

The author carries out research and writes in the manuscript.

Conflicts of Interest

The authors declare that they have no conflicting interests, as no Organization played a role in this study's screening, preparation, and submission.

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