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The Physical Effects of Gigantomastia On the Mental Health of the Women in Nairobi County, Kenya

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Abstract

Gigantomastia, characterized by excessive breast tissue growth exceeding normal proportions, presents significant physical health challenges for affected women. This qualitative study examined the physical effects of gigantomastia on women's health in Nairobi County, Kenya, through in-depth interviews with 30 participants aged 19-50 years using snowball sampling technique. The study employed a descriptive research design grounded in phenomenological epistemology to explore the lived experiences of women with this rare condition. Data was collected using semi-structured interviews conducted virtually via Zoom platform and analyzed through thematic analysis. The findings revealed six primary physical manifestations: large and heavy breasts causing excessive bodily strain, chronic pain affecting the back, neck and shoulders, challenges in obtaining appropriate clothing and undergarments, difficulties performing physical activities and exercise, postural problems leading to spinal complications, and sleeping difficulties affecting rest and recovery. These physical effects created a cascade of health complications that significantly compromised participants' mobility, daily functioning, and overall quality of life. The study concludes that gigantomastia represents a substantial physical health burden requiring comprehensive healthcare interventions. Key recommendations include establishing specialized clinics, developing clinical guidelines for early detection and management, implementing public awareness campaigns, and including gigantomastia treatment in national health insurance schemes to ensure accessibility and affordability for affected women.

Keywords: *Gigantomastia, Physical Effects, Women's Health, Nairobi County, Kenya*

1.1 Introduction

Gigantomastia is a state of extreme breast development that significantly affects women's physical health and overall well-being. According to existing literature, gigantomastia causes physical, social, and psychological distortions to the persons living with the condition, with breast enlargement causing general physical body discomfort to an extent of causing abnormalities in the upper spine to arc forward, a state called kyphosis (Saariniemi, 2011). The condition was first scientifically described by a scholar named Palmuth who cited this condition in 1648 of a sick person whose breast had over grown weighing 64 kilograms and named it gigantomastia (Yang, 2015). Since then, scholars have defined gigantomastia as breast expansion that needs to be reduced by at least 1,500g per breast in order to attain the normal state, with some definitions requiring an increment of the breast with a weight which is more than 600 grams thus leading to uncomfortableness (Agrawal & Kriplani, 2002; Vohra, Desai, & Shah, 2015).

The prevalence of gigantomastia is estimated to occur in 1 out of every 28,000 to 100,000 people (Benna, Naser, Fertani, & Ayadi, 2018), making it a rare condition that often goes unrecognized until significant physical complications develop. The real cause of gigantomastia is not yet established, however, the cause is thought to be triggered by increased hormonal level in the blood or amplified hormonal sensitivity, with hormones including prolactin, oestrogen, and progesterone (Türkan, Gökgez, Taşdelen, & Dündar, 2016). This proposition is evidenced by the fact that at the earliest period of pregnancy, an excessive increase in breast size is observed, and most patients with gigantomastia are women during periods characterized by the production of diverse hormones (Kim et al., 2018).

Despite the documented global occurrence of gigantomastia affecting 100,000 women worldwide (Chetty, 2016), it is of great concern that these numbers do not include any cases in Kenya due to a lack of empirical evidence, with available cases only captured in Gray Literature. Research indicates that gigantomastia causes physical impairment that inconveniences women, with physical, intense psychological and social problems that incapacitate women from participating in school activities and social relations (Ravichandra & Naz, 2016; Kim et al., 2018). Understanding the specific physical health impacts on women requires comprehensive investigation, particularly in the Kenyan context where cultural, economic, and healthcare accessibility factors may compound the physical challenges faced by affected women.

1.2 Problem Statement

Gigantomastia is an unusual medical problem characterized by intensive breast growth that manifests itself at the onset of puberty or during pregnancy, causing significant physical impairment that inconveniences women (Agrawal & Kriplan, 2012; Yang, 2015). The condition causes physical, intense psychological and social problems that incapacitate women from participating in school activities and social relations, with these problems fostering insecurity, deflating one's ego and eroding self-esteem affecting the mental health of the patient (Ravichandra & Naz, 2016; Kim et al, 2018). Despite the effect gigantomastia has on the physical health of women, there is a low level of awareness that hinders women from detecting their extraordinary breast abnormality early enough for appropriate medical intervention (Chacha, 2018). It is of concern that despite the documented effects of gigantomastia on women globally, there is no study carried out in Kenya to ascertain the physical effects of gigantomastia on the health of women, with available information being scanty and captured only in gray literature and televised video clips, creating a significant knowledge gap that this study seeks to address.

1.3 Research Objective

To determine the physical effects of gigantomastia on the physical health of the women in Nairobi County, Kenya.

1.4 Research Question

How do the physical effects of gigantomastia impact the physical health of women in Nairobi County?

2.1 Theoretical Review

This study was anchored on the Cognitive Adaptation Theory, developed by Taylor (1983) to address health problems such as women with chronic conditions, depression, anger control, pain management, and adjustment to physical health problems. In Taylor's scholarly work regarding adjustment of threatening life events, the theory of Cognitive Adaptation explains how people respond to a threatening event such as chronic illness, with gigantomastia being part of the threatening events that affect women's physical well-being. Initially, Taylor (1983) argued that successful adaptation to victimization is a process which involves a series of slightly positive self-relevant cognitive distortions, with an attempt to address this state involving three stages: search for meaning whereby the individual focuses on maintaining an optimistic attitude to achieve or uphold a positive attitude towards the occasion or life, regain mastery of one's life and the refurbishment of self-worth (Ratelle et al., 2004).

The key assumptions of the cognitive adaptation theory include that products of our thinking are the main determinant of our personalities, with reasoning being a common explanation of this rational process, challenging the behaviorism theory that contends that human behavior is a result of simple cause and effect. Another assumption of the theory is that worrying events affect how people think about themselves and their environment, with the theory also assuming that everyone is a custodian of his or her own life and that better things are likely to happen to him or her more than bad things (Fritscher, 2020). The key strength of the cognitive adaptation theory is the recognition that people can be resilient, maintain satisfactory levels of self-confidence and fortitude, which has helped young people master stages of human development and has been used to understand adaptation to developmental challenges such as transition to emerging adulthood (Helgeson, Reynolds, & Siminerio, 2014).

This theory can be applied in this study because having gigantomastia with larger breasts than normal is traumatizing and physically challenging for women. The large breasts can hinder a person from adopting comfortable physical positions, participating in physical activities, and maintaining proper posture, requiring women to develop resilience and adaptive mechanisms to cope with these physical limitations. According to cognitive adaptation theory, women with gigantomastia learn to use various coping mechanisms to overcome the negative physical effects emanating from their condition, such as finding alternative ways to exercise, adapting their clothing choices, and developing strategies to manage physical pain. The theory further explains how women affected physically by gigantomastia can overcome the physical limitations and develop positive attitudes toward managing their condition, as the negative physical experiences can cause distress and limit mobility, but the cognitive adaptation theory emphasizes unleashing one's potential and using a positive attitude to cope with challenging physical situations in a healthy manner rather than being overwhelmed by the physical constraints.

2.3 Empirical review

Gigantomastia affects how the body organs operate. In regard to this, different researchers have brought forth varied view and definitions of the effects of gigantomastia on young female adults. For example, in 2003, Chrominiski and others asserted that when the large breasts cause pain and other physical problems, the condition is called symptomatic macromastia. In extreme cases individuals living with this condition develop hand and figure numbness and grooves on their shoulders due to weight of their bra straps. They also face challenges in finding the right sizes of their cloths. Statistics by Lapid et al (2013) indicate that the reason why women suffering from gigantomastia undergo a breast reduction are back, neck, shoulder and bra grooving pains hence lowering the patient's self-esteem. Lapid et al (2013) conducted a systematic literature review with data drawn from 164 publications using the databases of Medline (search engine PubMed) and Web of Science.

One of the physical distresses caused by the extremely large breasts is poor posture which causes the upper spine to curve forward resulting in kyphosis (Traore et al., 2015). A typical case study of gestational macromastia conducted in India by Vohra, Desai, and Shah (2015) revealed that gigantomastia causes swelling in the breast connective tissues and this negatively impacts lactative period. The intensive and fast increase of breasts can lead to high levels of body heat hence leading to extraordinary physical body health problems such as itching, skin peeling, suppression of milk supply and mastitis (Traore et., 2015).

The findings agree with a study conducted in Zambia by Musa, Malumani, and Teyangesikayi (2018) which re-affirm the same physical effects of gigantomastia can be life-threatening in some isolated cases. According to Wilson (2018) other than an excessive overgrowth of breast tissue in one (Unilateral) or both breasts (bilateral), other symptoms of gigantomastia include infectious or abscesses and loss of nipple sensation (Spencer et al, 2020). Further researches carried out by Poojar et al. (2018), in India, articulated the disabling effects of gigantomastia that have effects on physical mobility such as manual work and sports. The compression from the breasts can also cause chest wall uneasiness and respiratory issues thus resulting in sleep disorders.

2.4 Conceptual Framework

A conceptual framework is a diagram that shows how the independent variables are associated with dependent variables in a study (Kothari, 2010).

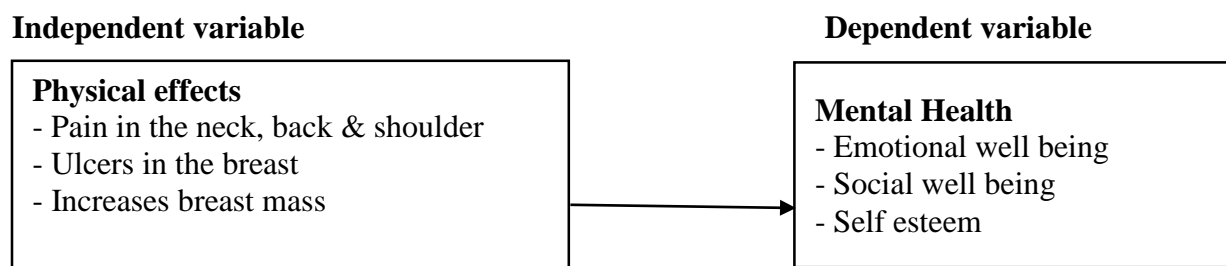


Figure 1: Conceptual Framework

3.1 Research Methodology

This study adopted a qualitative research approach using a descriptive research design to explore the physical effects of gigantomastia on women in Nairobi County, Kenya. The descriptive research design was chosen because it is used when the researcher can engage in a field survey by approaching the population of interest in order for the respondents to explain certain features about the problem under study, helping to gain new insights, discover new ideas and increase knowledge of the phenomenon (Mugenda & Mugenda, 2003). The study targeted women living with gigantomastia in Nairobi County, with a sample size of 50 participants drawn using snowball sampling technique, which is a non-probability sampling method used in medical and social science to source for respondents with unique characteristics that are rare (Kirchherr & Charles, 2018). Data was collected using a semi-structured interview guide through virtual interviews conducted via zoom platform, with each interview taking a maximum of 30 minutes and conducted in a language that participants understood, before being transcribed and analyzed using thematic analysis. Ethical considerations were ensured by obtaining permission from Tangaza University and NACOSTI, with participants being assured of confidentiality, voluntary participation, and the right to withdraw at any time, while strong privacy measures were implemented for the virtual interviews.

4.1 Results and Findings

The objective of the study was to explore the physical effects of gigantomastia on the mental health of women in Nairobi County. The main purpose was centered at participants expressing their experienced physical effects of gigantomastia. Five main factors emerged in relation to the physical effects: large and heavy breasts, physical pain, challenges finding appropriate clothes, difficulties doing physical activities and sleep difficulties.

4.4.1 Large and heavy breasts

Large breasts were the most verbalized by all (30) the participants in the study. The participants complained of large and heavy breasts. They indicated that at some point in their life their breasts grew large in size and never stopped growing as indicated in the following extracts from the participants' responses:

“Gigantomastia has caused an abnormal enlargement of my breasts, resulting in significant physical discomfort and strain on my body. By the way, I know when you have this condition, your breasts are larger than the normal size” (P/002/2024).

Another respondent alluded that the breasts were not only a burden, but also a source of pain in her life:

“Breast are good, but when they grow bigger than usual, they rob your source of self-consciousness, they become an embarrassment and also pain even. Gigantomastia, a condition that turns boobs into breasts of burden because of how large and heavy they become” (P/003/2024).

The excessive growth heightens the state of anxiety, makes a person feel less in control of their lives and more vulnerable as narrated below:

“My condition of excessive breast growth, which may have occurred spontaneously during puberty, in campus, my breasts began growing bigger and heavier overnight. I moved from a size 38C to size 42GG bra. The condition made my breasts so big and heavy

for me. It interfered with my day to day activities. I couldn't even wash properly because of how large my breasts were" (P/005/2024).

The unpredictability of the symptoms can be distressing. They impact negatively on the daily responsibilities, hinders one from running personal errands and demands significant changes in life style:

"I stopped socializing. And then, you know, when you gain weight, they become larger. That's also a problem. So I stopped interacting but the problem is that I had gained weight and my breast was so large. I never went home for 1 year" (P/009/2024).

Yet another respondent affirmed the level of discomforts experienced due to the massive breast load as indicated below:

"This is the condition where your breast enlarge and they grow, and they just don't stop. They keep growing. So, it's like an abnormal growth of, your breast tissues. So, in the physical part, first of all, these breasts are heavy. They grow big and they get heavy and the heaviness is a burden" (P/017/2024).

Some respondents went ahead to do comparisons on their breast size with their counterparts and ended up feeling low and unattractive.

"People have large breasts. But then when you look at photos of them, they're not as large as yours. Yes. People have large, but then they're just like it's not as large as mine. So your boobs, your breasts are just large, so you look fat. So you boil it down to your physical attributes. When I was younger and you look at older, mine look bigger and larger" (P/019/2024).

The findings of the study revealed how giving birth accelerated breast growth which demanded abrupt change of the bra to support unpredicted breast load.

"My situation worsened when I had my daughter, about 12 years ago going to 13, from 2011. My burst significantly grew, and also my weight increased. I think that was size 8 or 10, but my burst was already double "D". It didn't show so much then, because I was smaller, but the bigger I got, the bigger they grew. After the birth of my daughter, I don't know what happened, they just grew and grew. I came from being that size, a cup "D". I was at 30, I think, 32 "D". I became a 34 "E" or whatever. At some point I think I was almost size 38" (P/029/2024).

Lack of awareness of gigantomastia resulted to labelling of some respondents and were associated with promiscuity. According to the school management, the breast size became a disciplinary matter which required parental involvement as narrated one of the respondents:

"Most people don't know it's a condition, especially the young girls. For me, it started, I think, when I was in class 7. I had my mom even being called at school. "You know, your daughter is promiscuous because we can see her talking with boys, now look at even her boobs" (P/013/2024).

Another responded said:

“I remember there was a time I was called in the headmaster's office and my parent was called to find out if I was pregnant because they realized that my breasts are too big for my age. My mom was shocked but she explained I'm not pregnant, and my mother tried to explain to them that it might be some genes. So from that time I was bullied up to class 8” (P/026/2024).

According to the research findings, some asserted that the big breasts made their bodies appear disproportional because the upper part of the body was larger than the lower one. This distorted the body image and deflated their self- esteem:

“Sometimes you just want to jog or probably walk but you need a lot of strength because afterwards you get back pains yet you're doing that exercise hoping you're going to reduce weight. You lose weight in other parts of the body but for the breast area it's still just the same” (P/005/2024).

The issue of deflated ego affected many respondents as narrated below:

“Somehow it messes up with the esteem. I think majorly that's in with because you're not so comfortable your body frame because now personally the boobs are way bigger as opposed to my body size because I'm kind of I'd say like a medium-sized lady or medium to small yeah so the boobs were a bit conspicuous making me immoderate” (P/008/2024).

Another respondent stated that:

“The weight of the breasts became excessive and a load on the chest making it difficult to sit up because the upper body is bigger” (P/015/2024).

According to the research findings, the respondents asserted that the big breasts made their bodies unproportional. Some alluded that their upper part of the body was larger than the lower one. Even in marriage the breasts size became a challenge where husbands used derogatory language to their partners whenever an argument arose. They referred to them as people with big breasts as narrated by one of the respondents:

“I remember during my first marriage, my husband used to throw some bad words about my breasts. He would always focus on my big breasts. This comments deflated my self-esteem and made me feel low” (P/028/2024).

4.4.2 Physical Pain

Majority of the respondents also complained having unbearable pain on their backs, shoulders, chest and neck that caused them to take medication to ease the pain. These are supported by the following extracts from the interviews:

“I was diagnosed with back pain, which later migrated and affected my right leg that made it so painful and at times I experienced numbness” (P/003/2024).

The issue of back pain effected other respondents as attested below:

“My legs used to swell a lot, I think, because of the weight. So, I used to have a very hard time with my legs. I also used to have back pain on the lower parts of the spinal cord. It used to be very painful and the pain was unbearable” (P/026/2024).

All the respondents complained of shoulder pains. Some reported that their shoulders were scorching and had wounds around the shoulders caused by the bra straps as one responded was quoted saying:

“I got black marks on my shoulders that hurt because the weight was too much” (P/004/2024).

The above statement was affirmed further that:

I had a problem when my shoulder kept on dislocating and I visited my orthopedic surgeon, who performed surgery to reinforce my shoulder. That’s when he realized that the weight on my bust was the cause of the recurrent and painful dislocations. I was diagnosed with gigantomastia and recommended a breast reduction surgery immediately” (P/006/2024).

Another respondent indicated:

“My mother once noted that my recurring shoulder dislocations could be due to my enormous breasts. She suggested we visit a specialist and plan for a breast reduction surgery, but I dismissed her. It turns out her instincts were right. My doctor had been trying to figure my persistent, recurring shoulder dislocations, which started when I hit puberty. The first time I went under the knife was in the year 2002, as a teenager. In 2010, I was back in the hospital due to another dislocation, and that’s where my doctor pointed out that the weight of my enormous breasts was the cause of my constant dilemma” (P/020/2024).

The nerves around the neck area were seriously affected causing neck pains as one respondent was quoted saying:

“I experienced severe back, neck and shoulder pains due to the weight of my breasts. The pain often radiates down my spine and affects my posture” (P/010/2024).

The friction between the breasts and the skin caused heat rash even during a cold weather as one respondent was quoted saying:

“I used to get heat rash even when it is being cold. You can imagine getting a heat rash when it's cold, and you need to wear warm clothes” (P/019/2024).

It was worse for people who went to places with a lot of heat as one respondent was quoted saying:

“I remember I once went to Dubai and because of the heat, I had a very bad rash. At first, I thought it was eczema. It was a really horrible rash under my breast. I tried applying cream, it didn't work and it was painful. Sometimes the skin ruptured and it was very uncomfortable” (P/027/2024).

The heat rashes caused a lot of pain and irritation under the breasts resulting in visiting doctors and at times taking a lot of medication, as one respondent reported:

“I tried running a marathon once, and the friction peeled the skin off my chest. I even went to a doctor and the doctor was like, what happened? It was a very large friction band. I remember having back pain and unexplained pain around my neck. Initially, I thought maybe it's stress because of work. But I'd get, like, debilitating neck pain”
(P/030/2024).

4.4.3 Challenge getting appropriate clothes

Due to the increase in size and weight of the breasts, finding fitting and appropriate clothes was a challenge. This was because whatever was in the market could not fit their breasts size as one respondent narrated:

“Because sometimes getting the right outfit is usually a problem when you have such a condition. You have to contend with what is in the market and sometimes what is available cannot conform to this condition” (P/003/2024).

Another respondent attested that:

“Whenever my friends went shopping, they left me behind as I couldn't find a bra size that would fit. I changed to new bra cup sizes every two months had difficulty breathing and my bra was digging deep into my shoulders” (P/013/2024).

You can't just walk in any shopping mall and get what one wants as one respondent was quoted saying:

“You feel embarrassed and sometimes ashamed. You can't just walk into a regular store and buy what you want. It affects you psychologically” (P/026/2024).

Some of the respondents reported how gigantomastia limited what they could put on. This forced them to import expensive bras as one respondent stated:

“I had a very stressful time buying bras because I could no longer go into a mall or buy off the rack. I'd either go to places before the good shops like Double D's. I've been a customer of a shop called Double Ds for a long time. Because they cater for people with my condition. And, I remember, I had to import my bras. Or if a friend was travelling back from the US or even a family member, I would make an order for like 6 or 7 bras. I spent quite a lot, close to KShs. 100,000/- I would feel, good because I would have a supply for a year or 2 years” (P/028/2024).

It was very difficult to get the right size of the bras forcing them to use two bras to hide and support their breasts. Some respondents were forced to wear bras bigger than those of their mothers. At times they would use wire bras which would hurt them as one respondent quoted:

“There are some bras that I wore that would hurt. There's a time I would wear this wired bra and I got a wound from that and it hurt because the weight was too much”
(P/005/2024).

The respondents had a challenge finding clothes that would match the need of their bodies. In the process of trying to look neat some of the respondents' found ways of hiding their chests by wearing jerseys, big sweaters, scarfs, buggy clothes, big T-shirts and jumpers.

“Additionally, it was difficult getting new clothes and bras causing them to buy second-hand clothes that were pricy. Most people with big boobs do not get bras and clothes from shops, you are forced to go for second clothes which are also not easy to get. And one would ask them to call when they have your size” (P/013/2024).

The issue of not getting the proper clothes cut across to several respondents and to improvise to conceal their huge breast size:

“I could only shop in flea markets. I changed my wardrobe and started wearing baggy clothes, T-shirts and coats. Things got even worse when the bra started cutting into my shoulders and I had bruises. I prayed to God for answers because I was so frustrated and didn’t know how I could be helped. I had bad shoulder and back pains” (P/013/2024).

Another respondent stated:

“I always felt like I was not looking my best. Because I did public speaking, I would always put on a nice scarf to hide my big burst. I eventually had lots of scarfs that I would use to hide and feel a little more confident” (R029/2024).

The lack of fitting closed was common experienced by other respondents alluded in the testimony:

“My self-esteem wasn’t really affected as I’m naturally a very bubbly and outgoing person, though getting nice fitting dresses was a challenge, confining me to T-shirts and jeans” (P/008/2024).

Several respondents cited limitations to source for fashionable clothes due to the body shape:

“The biggest hurdle was when I would go shopping for a bra but never got my size to a point where I would sometimes throw a fit in a shop because I never understood the lack of accommodation. Even though like most women, I loved trendy fashion, I was reduced to a “T-shirt and jeans girl” because the clothes I desired never fit well” (P/011/2024).

“You are so self-conscious of your appearance. I would never remove my sweater since I joined form 2 up to when I went to college. That was between 2004 up to 2010. In 2010, is when I started removing my sweater. Before then I could never remove my sweater” (R022/2024).

“The outlook after dressing up, you are not so confident in yourself because you feel like your upper part of the body is much bigger than the other part of your body” (P/006/2024).

Another respondent indicated:

“After the surgery I felt like a new human being with a new lease of life. After the surgery, I, where my classmates could not recognize me. I had become smaller and I could now wear suits like the rest of them, getting fitting clothes was no longer an issue” (P/009/2024).

4.4.4 Challenges doing physical activities

Majority of the respondents complained having to strain a lot while doing physical activities. They reported always being tired, having physical discomfort and that the weight of their breasts would put them down. This challenge was affirmed by several respondents as captured below:

“I would strain while doing activities” (P/002/2024).

Some of the respondents were not able to run in the field with the students even though their profession required to do so. As one respondent was cited saying:

“Oh, it was very hard doing things like exercising and running, because the breasts are big, you can't run. As a teacher, I have to go to the field and train with my students and at times they're looking at you wondering why you are not doing the activities with them. It was very hard” (P/020/2024).

The inability to participate in social activities was common to other respondents stated hereunder:

“I was also asked to have a boob top. But the breasts did not stop growing. Taking up sports became a burden because of the size of my boobs” (P/001/2024).

Because to the weight from their breasts they were not able to engage in physical exercises like swimming, gym and running even though they had deep desire to do so since they were young as two respondents were quoted saying:

“I was in class six, I was a long-distance runner, I cannot do that anymore. I was not able to take part in physical activities in high school. “I got tired easily and had to find somebody to do something for me and I was not disabled. I just had very humongous big boobs and my back was paining” (P/008/2024).

The challenges of not coping with physical activities continued to elicit support from the respondents:

“Unfortunately, as much as I would have wanted to, I could not join my friends during school activities. With my bust growing almost daily, I could not run and I could not lift my hands. The slightest activity would affect my breathing and my life became largely sedentary” (P/003/2024).

In a situation where the respondents engaged in physical activities, it forced them to put a lot of effort which made them experience fatigue as one respondent was quoted saying:

“Physically, you have to put extra effort on doing everything because of the extra weight. So, there's a lot of panting and sweating those results in a lot of fatigue and pain on the back and on the shoulders” (P/015/2024).

Additionally, for those who loved swimming, they were forced to swim with bras which is not part of a swimming consume. That was not pleasing as one respondent was quoted saying:

“I loved swimming but it was not easy activity because of the size of my breasts. When swimming, you have to wear a swimming costume. You’re not supposed to swim with bras, but for a long time, I used to. Most of my costumes don’t fit and your breasts tends to fall and it was not physically appealing. So, I opted to wear a bra most of my teenage life so as to, you know, look better” (P/016/2024).

Furthermore, when the respondents engaged in physical activities they reported experiencing shortness of breath, panting, breathing difficulties, running out of breath, having a heavy chest and feeling of having asthmatic attacks as one respondent was quoted:

“I started having breathing problems. It was really tiresome and it felt like an asthma attack. I couldn’t do much for myself” (P/007/2024).

Some of the respondents experienced skin irritation when they involved in physical activities as one of the respondents was cited:

“Sometimes because of the size of the breast, you can’t even run. I tried running a marathon once, and the friction peeled the skin off my chest. When I went to a doctor and the doctor was like, “what happened?” (P/027/2024).

Because of the challenges associated by being physically active, the respondents stopped taking part in physical activities making some of them lazy. Some opted to sit down for long and that also had its consequences as one respondent was quoted saying:

“You sit down and by the time you are getting up, you are tired” (P/013/2024).

Additionally, lack of exercises led to joint pains, numbness, swelling and at times blood clots. Another respondent was quoted saying:

“I got tired easily and had to find somebody to do something for me and I was not disabled. I just had very humongous big boobs and my back was paining” (R008/2024).

Simple tasks like walking and exercises are difficult and often when not done they limit a person’s mobility:

“Simple tasks like walking, exercising, finding comfortable bras had become a challenge” (P/009/2024).

4.4.5 Posture

The strain from the upper body was the biggest contributor to the posture problem. Because, of the weight from the breasts, the respondents expressed a serious concern of their posture. Some of them leaned forward whether they were walking or sitting.

As one respondent was quoted saying:

“Due to the weight of the breasts, my sitting posture was really bad because I used to bend. When you are sitting you are in a bending position as you're carrying a weight in front of you (P/021/2024).

Majority of the respondents could not sit upright for long and at times would find a place to lean on because in the evenings they would experience a lot of back pain. The posture led to change of walking style as one respondent stated:

“You can’t walk with your back straight” (P/019/2024).

Another responded reaffirmed the repercussions of large breasts on the posture:

“It can also affect a woman's posture, resulting in the woman slouching her shoulders. The weight of the breasts could cause back problems. Depending on the weight they are exerting on the backbone, some women are immobilized and their activities are limited” (P/019/2024).

Additionally, the respondents experienced difficulties bending their backs as these respondents were quoted saying:

“My posture has significantly worsened leading to musculoskeletal issues” (P/011/2024).

The respondents continued to narrate their ordeals with the condition as indicated in their testimonies:

“You can't bend and when you bend you feel like you're running out of breath” (P/017/2024).

Another responded stated:

“I experienced severe back, neck and shoulder pains due to the weight of my breasts. The pain often radiates down my spine and affects my posture” (P/010/2024).

Furthermore, the respondents were scared of how their postures were causing them to stand and walk in a particular style to hide this problem as expressed by one of the respondents:

“You have to make sure that you are standing in a certain way that does not show your posture” (P/029/2024).

4.4.6 Sleeping Difficulties

Sleeping was a challenge for some of the of the respondents. Though the respondents went to sleep tired, they woke up also very tired as one of the respondents stated. This is because sleeping with the load on their chests was difficult while others were forced to sleep with a bra which is not healthy. Indeed, sleeping was an issue for some as it was a whole process as one has to keep their boobs up so they may not fall, as three of the respondents quoted:

“Sleeping was a process” (P/024/2024).

“Turning was a whole mess because of the weight of the breasts” (P/008/2024).

“At times you are forced to sleep on one side which was a challenge and hurting as expressed by one of the respondents. Sleeping on one side was hurting and uncomfortable” (P/016/2024).

4.2 Discussions

The objective of the study was to determine the physical effects of gigantomastia on the mental health of the women in Nairobi County, Kenya. This objective aimed at determining how the physical conditions of gigantomastia affect the mental health of the respondents. Through their shared experiences and responses from the research questions, the findings revealed that gigantomastia affects mental health.

The insights from this study are in line with the findings of Kluwer and Williams (2014) that established that gigantomastia was associated with large heavy breasts and physical pain. The responses obtained from the participants corresponded with that of Chrominiski (2003) that indicated that large breasts cause pain and other physical problems. Also the study findings of are in tandem with Lapid et al. (2013) that affirmed the reason why women suffering from gigantomastia undergo breast reduction is due to back, neck, shoulder pain. Traore et. (2015), stated that the massive and fast increase of breasts can lead to high levels of body heat hence leading to extraordinary physical body health problems such as itching, skin peeling, suppression of milk supply and mastitis. These findings collaborates with the responses obtained from the sample of the participated in this current study.

Participants also cited challenges in getting fitting clothes due to the size of the breasts. This corresponded with findings of Snodgrass and Sylvania (2012) which revealed the challenges women with gigantomastia faced in finding the right sizes of their clothes. Long and Vasconez (2010) further articulated the difficulty that confronted the women in search for fitting clothes forcing them to improvise. Others resulted in making alterations that aggravated in finding clothes their feelings of unattractiveness and psychological wellbeing (Long & Vasconez, 2010).

Additionally, the study findings revealed the challenges participated encountered when involved in physical activities such as painnad breathing problems. The challenges corresponded with the by carried out by Poojar et al. (2018). The same study articulated the disabling effects of gigantomastia that impacted on physical mobility such as manual work and sports. On the other hand, Traore, et al. (2015) found out that one of the physical distresses caused by the extremely large breasts is poor posture which causes the upper spine to curve forward resulting in kyphosis that resulted to sleeping difficulty.

5.1 Conclusion

The study's examination of the physical effects of gigantomastia on women in Nairobi County reveals a condition that significantly impacts women's physical health and daily functioning. The findings demonstrated that women with gigantomastia experience multiple physical challenges including large and heavy breasts, chronic pain, difficulties obtaining appropriate clothing, challenges performing physical activities, postural problems, and sleeping difficulties. These physical manifestations create serious health complications that compromise women's mobility and quality of life, highlighting the urgent need for medical recognition and healthcare interventions to address the physical health needs of women living with this debilitating condition.

6.1 Recommendations

Based on the study findings, the following recommendations are proposed:

1. The Ministry of Health should establish specialized clinics for gigantomastia diagnosis and treatment, while developing clinical guidelines for early detection and management.
2. Public awareness campaigns should be implemented to educate communities and healthcare workers about the condition's signs and symptoms.
3. The government should include gigantomastia treatment in national health insurance schemes to ensure accessibility and affordability.
4. Healthcare facilities should be equipped with trained personnel capable of providing comprehensive care including pain management and surgical interventions when necessary.

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