Assessment Of Coping Strategies Among Clients with Infertility Attending Gynecological Clinic in Abubakar Tafawa Balewa University Teaching Hospital Bauchi, Bauchi State.

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Abstract- ***The research work is carried out in Bauchi state. It was based on the Assessment Of Coping Strategies Among Clients With Infertility Attending Gynaecological Clinic In Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Bauchi State. This study is based on a significant reproductive health issue affecting millions of people worldwide, causing emotional distress and psychological trauma. This study aimed to assess the coping strategies employed by clients with infertility attending the gynecological clinic at Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Bauchi State, specific objectives include: to identify the types of coping strategies among clients with infertility, to determine the gender differences in clients with infertility, to identify the psychological distress among clients with infertility. A descriptive cross-sectional design was used, and a simple random sampling technique was employed to recruit 114 participants. Data was collected using a standardized adapted coping strategies questionnaire. The results showed that the majority of participants employed problem focus such as seeking medical care (3.2), communicating openly with health care providers (3.2) and adaptive coping strategies such as; wish the infertility would go away (3.4), throwing oneself into work (3.0), significant gender difference where as women tend to use emotion focus and problem focus rather than avoidance focus coping strategies as used by men and psychological distress as sadness (3.3) and anxiety (3.9). The study highlights the need for healthcare providers to incorporate psychological support and counseling services into infertility treatment programs to enhance clients' coping mechanisms. Summary and conclusion were provided, some of the recommendations made were: Healthcare providers should encourage clients with infertility to use problem focused and adaptive coping strategies such as seeking medical care, self care and social support, Midwives should provide emotional support and counseling to clients with infertility to help them cope with their emotions and stress. Healthcare providers should be aware of the potential psychological distress experienced by clients with infertility and provide appropriate referrals to mental health professionals.***

Index Terms - Infertility, Coping strategies, Gynecological clinic, Reproductive health.

I. INTRODUCTION

1.1 Background to the Study

According to a statistical evidence, Infertility is a global challenge which many people of all social, economic and cultural classes are grappling with. Infertility has always existed but is now recognized as a global reproductive health problem not as an important reproductive health. It is a worldwide concern (Domar, 2016).

World Health Organization [WHO] (2020) defined Infertility as the inability of a clients to conceive after one year of regular, unprotected sexual intercourse. According to Peterson (2019), this could be partly attributed to the strong values associated with procreation, one of the aspirations still considered as basic achievement for the majority of human beings.
More than 70 million people worldwide are affected by infertility, with an estimated 15% of clients

experiencing infertility (Tabong et al., 2015). In Africa, the prevalence of infertility is significantly higher, affecting approximately 5-30% of clients as reported for different countries (Abebe et al., 2020). Nigeria, in particular, has a high prevalence of infertility, estimated to be around 20-25% (Chimbatata et al., 2016).it is estimated that 60-80 million clients are suffering from infertility globally every year and between 15-20 million are Indians alone, although many still think of infertility as women problem, up to half of the cases of infertility involves problem with the men. Infact, it is about 20-30% of the time, a man's low fertility is the obstacle for conception (Obi, 2015).

Infertility is a complex and emotionally challenging experience that affects not only
individuals but also their relationships and communities. The cultural, social, and economic contexts in Nigeria and sub-Saharan Africa exacerbate the emotional toll of infertility, making it a pressing public health concern.

Coping strategies play a crucial role in mitigating the emotional and psychological effects of infertility (Greil et al., 2015). Clients dealing with infertility employ various coping strategies, including emotional expression, social support, problem focused coping, passive avoidance. Research indicates that clients utilize a variety of coping methods, including social support, self-controlling strategies, and faith-based practices (Odek et al., 2021). Self-controlling strategies, such as positive reappraisal, help individuals manage their emotions and maintain hope, many clients turn to spirituality and prayer as a means of coping, reflecting their cultural beliefs and values (Odek et al., 2021). Trouble conceiving challenges men and women's hopes of being a parent, expectations for their futures and confidence in one's body and health (Galst JP, 2018).

Gender differences were clearly identified. Women coping with infertility may be at risk for self-depreciation and isolation because of their choice of coping strategies and the meaning they ascribe to the infertility. As a result, they are likely to experience more heightened distress than men who are also infertile. Counselling that is specific to gender-needs is indicated (Pottinger et al., 2015). There is significant difference in the mean responses of male and female participants with infertility on their use of coping strategies. Females use more self-controlling strategies and positive reappraisal, while males use escape-avoidance and other coping strategies (Maduakolam et al., 2014).
In Nigeria, the cultural emphasis on childbearing and the stigma surrounding infertility can contribute to the emotional toll and psychological effects of infertility (Oladapo et al., 2017).

Anxiety, depression, and stress are the most common forms of psychological distress among infertile patients which are associated with poor marital quality and quality of life, lower compliance with fertility treatments, and adverse IVF outcome (Crawford et al., 2017). Thus, psychological distress among infertility patients warrants considerable attention. A Yoruba adage says children are the clothes to the body, without children, you are naked. Infertility has been linked to increased symptoms of depression, anxiety, and stress (Peterson et al., 2018). The emotional toll of infertility can also affect relationships, leading to conflict and strain.

With these aforementioned events, it is paramount to identify the coping strategies for infertile clients for use by them to provide relief. Understanding the coping strategies employed by infertile clients in this context is crucial for improving support services. This study aims to assess coping strategies among infertile clients in Nigeria, particularly in ATBUTH.

1.2 Statement of Problem

Globally, infertility affects 15% of clients, accounting for 48.5 million clients worldwide (WHO, 2016). This staggering number highlights the widespread impact of infertility on individuals, families, and communities. In the United States of America [USA], infertility affects 6 million clients of which depression is in a range of 15-54% (Domar, 2016).

In Africa, the burden of infertility is even more pronounced, affecting 20-30% of clients. This region bears a disproportionate share of the global infertility burden, with far-reaching consequences for well-

being with a prevalence rate of psychological distress among infertile clients varying by region (Naab et al, 2021). In Mali, about 20% of women reported significant psychological distress related to infertility (Hess & McCarty, 2018). In Ghana, approximately 31.7% of clients experienced severe anxiety, with 60.8% reporting anxiety symptoms and 43.3% experiencing depression (Alhassan et al, 2023). South African studies indicate that clients facing involuntary childlessness exhibit significantly higher distress levels compared to fertile counterparts (Khamis & Rukundo, 2020).

Within Africa, Nigeria stands out as a country with a significant infertility burden, with an estimated 20-25% of clients experiencing infertility. In south west Nigeria, the rate of problems of infertility may be as high as 30% (Nylander and ladipo,2018). This translates to millions of individuals and families affected by infertility, with significant emotional, social, economic and psychological implications with an estimate of 60.8% anxiety, 43.3% depression, and 37.5% faced stress related to infertility (Ezeh & Okwor, 2021).

In northeastern Nigeria, infertility rates are alarmingly high, with a profound impact on the lives of clients, families, and communities. Ebonoyi et al., (2016) on their research topic "assessment of factors influencing infertility in rural Nigerian community revealed the prevalence of primary Infertility (9-12%), secondary infertility among the subjects was (54.1%) . At the cornerstone of every culture is the increasing acceptance throughout the world that a family can include client with or without children, most cultures still find this unacceptable.

However, in Bauchi state, infertility still exist despite the ever-increasing population and fertility rates is common (Dattijo et al., 2016). According to department of obstetrics and gynecology, Abubakar Tafawa Balewa University Teaching hospital, Bauchi, Bauchi State [ATBUTH] (2016), 23.9% of infertility cases were found despite the use of different infertility care. Clients diagnosed with infertility and those undergoing infertility treatment portray symptoms of psychological distress such as anxiety, depression, sleep disturbances and many more. Infertility can lead to considerable stress among clients, failure to use coping strategies can lead to psychological distress and disorders in infertile clients adversely affecting their physiological function. This prompt the researcher to assess the coping strategies among clients dealing with infertility attending gynecological clinic in Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Bauchi state.

1.3 Objectives of the Study

The aim of this study is to assess the coping strategies among patients with infertility attending gynaecological clinic in Abubakar Tafawa Balewa University Teaching hospital.

1. To identify the types of coping strategies used by clients dealing with infertility attending gyanecological clinic Abubakar Tafawa Balewa University Teaching Hospital.
2. To determine the gender differences in the use of coping strategies among clients with infertility attending gynaecological clinic in Abubakar Tafawa Balewa University Teaching Hospital.
3. To identify the psychological distress of infertile clients attending gynaecological clinic in Abubakar Tafawa Balewa University Teaching Hospital.

1.4 Research Questions

The study provided answers to the following research question.

1. What are the types of coping strategies used by clients with infertility attending gynecological clinic in Abubakar Tafawa Balewa University Teaching hospital, Bauchi?
2. What are the gender differences in the use of coping strategies used among clients with infertility attending gynecological clinic in Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Bauchi state?
3. What are the psychological distress of infertile clients attending gynecological clinic in Abubakar Tafawa Balewa University Teaching hospital Bauchi, Bauchi state?

1.5 Significance of the Study

the significance of the study to the profession, healthcare providers, and society:
This study contributes to the existing body of knowledge on infertility and coping strategies, the findings inform the development of evidence-based guidelines for infertility. Infertility can have profound psychological effects on individuals and clients. Policymakers must prioritize addressing infertility-related psychological distress, Integrated mental health services, counseling, and therapy are essential, this is done by incorporating mental health professionals into fertility clinics and primary healthcare facilities, providing accessible counseling and therapy options, establishing support groups, promoting public awareness, educating healthcare providers, and funding research.

This study provides valuable insights into the coping strategies employed by clients with infertility, enabling healthcare providers to develop effective support systems and interventions. By understanding the emotional and psychological impacts of infertility, healthcare providers can offer supportive care, improving patient satisfaction and outcomes.
By addressing the emotional and psychological impacts of infertility, this study promotes societal understanding and empathy. The findings helped reduce stigma surrounding infertility, encouraging open discussions and support for affected individuals and families.

1.6 Scope of study

The study was delimited to coping strategies among clients with infertility attending gynaecological clinic in Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Bauchi state.

1.7 Operational definition of terms

Assessment: this refers to identifying the coping strategies, examining the gender differences when using coping strategies and determining the psychological distress of infertile clients in Abubakar Tafawa Balewa University Teaching hospital Bauchi, Bauchi state.

Coping strategies: refers to the methods or techniques used by clients to manage, tolerate, or overcome the emotional, psychological, and social challenges associated with infertility.
Clients: this means those individuals be it male or female dealing or battling with infertility in Abubakar Tafawa Balewa University Teaching hospital Bauchi, Bauchi state.
Infertility: this is the inability of clients in Abubakar Tafawa Balewa University Teaching hospital Bauchi, to conceive or have a live birth after 1 year of regular unprotected sexual intercourse.
Gender Differences: this refers to the differences observed in the coping strategies used by infertile clients in Abubakar Tafawa Balewa University Teaching Hospital, Bauchi.
Psychological distress: refers to the different kinds of emotions experienced by infertile clients attending gynaecological clinic in Abubakar Tafawa Balewa University Teaching Hospital, Bauchi.

II. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Concepts of infertility

According to World Health organization [WHO], (2024), Infertility is a disease of the male or female reproductive system defined by the failure to achieve a pregnancy after 12 months or more of regular unprotected sexual intercourse.

According to American Society For Reproductive Medicine [ASRM], (2023), Infertility as a disease, condition, or status characterized by any of the following; The inability to achieve a successful pregnancy based on a patient's medical, sexual, and reproductive history, age, physical findings, diagnostic testing, or any combination of those factors

Infertility can be defined Inability of a woman to conceive within one year of unprotected sexual intercourse without the use of any method of contraception. Royal college of obstetrics and gynecology [RCOG], (2015, p.3) stated that; Infertility has not changed greatly, although, more clients are seeking medical care more than before.

There are basically two types of infertility; primary and secondary.

Primary Infertility – This occurs when a client has no record of conception with them indulging in unprotected sex for one year or more. Secondary Infertility – This is where the incapacity to conceive occurs after the client has had one or more successful conceptions (WHO, 2020). Secondary Infertility is the inability of a woman when there is history of previous pregnancy irrespective of the outcome (Speroffle, 2014). may be due to single course in you or your partner, parenthood is one of the major transitions in adult life for both men and women (Abdullahi, 2018).

Causes of infertility in females includes; developmental abnormalities of the female reproductive tract, inflammatory diseases of the tract, endometriosis.in males, annoying of the sperm, developmental abnormal of the reproductive system diseases of the testicles there are certain risk factors that can increase infertility in both sexes; age, stress, smoking, chemotherapy, radiation, obesity, diet, exercise, narcotics, medical conditions (Brazier, 2023).Combined factors of infertility: in some cases, Both the man and the woman may be infertile or sub fertile .in other cases, the causes are suspected to be immunological or genetics, it may be that both partners are independently fertile but the client cannot conceive together without assistant .Unexplained factors: in this case, abnormalities are likely to be present but not detected by current methods. Possible cause could be that the eggs are not released at the optimum time of fertilization that it may not enter the fallopian tube, sperm may not be able to reach the egg fertilization may fail to occur, transport of the zygote may be disturbed or implantation fails (Altimate, 2010).

Treatment of infertility includes treating the underlying causes, assisted reproductive technology examples in vitro fertilization, surrogacy and adoption.

2.1.2 Concepts of Coping Strategies

Coping strategies are defined as an individual's internal and external determination of their behaviors and thoughts in a stressful situation (stephenson & Delongis, 2020).

According to Annakay Newell and Diane Davis (2023), coping strategies are the process of using behavioral and cognitive approaches to manage difficult or threatening situations, and plays an integral role in maintaining the physical and mental well-being of an individual. Coping strategies are tools or techniques that a person uses to manage their thoughts, feelings and behaviors during stressful or challenging situations.

In a study published by an online encyclopedia, coping strategies can be cognitions or behaviors, can be individual or social.it is a way for people to maintain their mental and emotional wellbeing.

Coping strategies also known as coping mechanisms are defined as the cognitive and behavioral approaches that we use to manage internal and external stressor (Algorani & Gupta, 2021). Coping strategies are cognitive, emotional, and behavioral efforts to manage stress, including problem-focused, emotion-focused, and meaning-focused coping.

2.1.3 Types of Coping Strategies

Lazarus and folkman Identified two main types of coping strategies, namely;
Problem focused and Emotion focused coping strategy.

1. Problem focused coping strategy: The definition of problem-focused coping is a problem-solving technique in which an individual addresses a problem or stressor directly in an attempt to alleviate or eliminate it (Hartin & Robb, 2023). It is also referred to as problem-centered coping. Problem-focused coping, also known as problem-centered coping, involves actively addressing the source of stress or anxiety. This strategy includes steps such as identifying the problem, gathering information, weighing options, taking action, and evaluating progress (Munro, 2023). Examples of these strategies include problem-solving, seeking social support, leave unhealthy situations and setting goals and working towards them (Harris, 2021). Problem-focused coping is particularly

effective when the issue is perceived as controllable and requires immediate attention (Gillis, 2023). However, it may not be effective when the problem is beyond one's control or when emotions need to be processed first (Ozoemene, 2021).

2. Emotion focused coping strategy: Emotion-focused coping refers to using skills for processing and dealing with feelings that arise due to stressful situations. It utilizes inward-facing strategies, including meditation, journaling, and breathing techniques, to reduce distress and regulate emotions. Unlike problem-focused coping, which deals with changing external stressors, emotion-focused coping skills are intended to reduce internal emotional distress (Agberia & Mokh, 2022).Emotion-focused coping can be utilized in both adaptive and maladaptive ways. When employed adaptively, techniques such as journaling, meditation, and breathing exercises effectively reduce stress and help regulate emotions (Risser, 2023). However, maladaptive uses, such as denial, avoidance, or toxic positivity, can hinder emotional processing and exacerbate stress (Munro, 2023). Emotion-focused coping strategies aim to manage emotions rather than directly address the problem, including emotional expression, mindfulness, relaxation techniques, distraction, positive thinking, self-soothing, acceptance, and humor (Raypole, 2023). This approach is often used when emotions are overwhelming or when immediate relief is needed; however, excessive reliance on it may lead to avoidance of underlying issues (Ozoemene, 2021).

   Other types of coping strategies include:

3. Appraisal focused coping strategy: Appraisal-focused (adaptive cognitive) strategies occur when the person modifies the way they think, for example: employing denial, or distancing oneself from the problem, seeing the humor in a situation. Individuals who use appraisal coping strategies purposely alter their perspective on their situation in order to have a more positive outlook on their situation (Senanayake et al., 2018). Appraisal-focused coping aims to modify how individuals perceive and interpret situations rather than changing the situations themselves. This type of coping is often utilized when the situation is perceived as uncontrollable, emotions are intense, or a fresh perspective is needed (Saigal, 2023). However, it can have limitations, such as avoiding the actual problem or distorting reality (Folkman et al., 2014). Strategies associated with appraisal-focused coping include reframing thoughts, distancing from the issue, and finding humor in challenging circumstances (Raypole, 2023).
4. Occupation focused coping strategy:
   Occupational therapy enables clients to self-manage their health through the use of occupation; however, additional occupation-focused assessments are needed to capture people's subjective experiences associated with everyday activities as awareness of one's experiences can help promote change. this is when we change our occupation itself (Atler et al., 2017). Occupation-focused coping strategies involve using work or productive activities as a way to manage stress and emotions. This approach can provide a sense of purpose, control, and fulfillment, while also offering a healthy distraction from stressful situations. Occupational therapy interventions focusing on participation and performance in occupations related to paid and unpaid employment and education for people with serious mental illness (Munro, 2023).

Examples of occupation-focused coping strategies: immersion in work, Skill-building, Helping others, Task-oriented coping, Occupation-focused coping is often used when: Work is a source of personal fulfillment, Distraction from stress is required. However, occupation-focused coping can also have limitations, such as: Overemphasis on work can lead to burnout, avoiding emotions rather than addressing them (Seladi, 2023).

2.1.4 Coping Strategies Used By Infertile Clients

The capacity to adapt to infertility-related stress depends on the woman and her partner coping strategies (Li et al., 2015). Coping strategies used by infertile clients are categorized into 4 groups: active-confronting, active-avoidance, passive-avoidance and meaning-based coping strategy.

i)Active confronting coping strategy: The active-confronting people express their emotions, seek help, and get advice from their fellow peers (Pàsztor et al., 2019). Active confronting coping strategy involves directly addressing and tackling the stressor (infertility) through proactive efforts. examples of active confronting coping strategies used by infertile clients:
Seeking medical treatment: Pursuing fertility treatments, such as IVF or surgery to address underlying medical issues (Resolve, 2023).
Self -controlling: controlling their emotions and keep it to themselves (Agnes, 2021).
Educating themselves: Learning about infertility causes, treatment options, and success rates to feel more in control.
Support group participation: Joining support groups to connect with others facing similar challenges (Maduakolam et al., 2021).
Advocating for themselves: Communicating openly with healthcare providers, asking questions, and seeking second opinions.
Making lifestyle changes such as diet modification, exercise etc.
Exploring alternative options: Considering adoption, surrogacy, or donor conception.
Setting boundaries: Limiting exposure to triggers, such as social media or baby showers, to reduce emotional distress (Resolve, 2023).
Seeking counseling: Engaging in individual or client therapy to address emotional and relationship challenges.
Taking action to reduce stress such as yoga, meditation etc .
By using these active confronting coping strategies, infertile clients can regain a sense of control, build resilience, and navigate the challenges of infertility with greater confidence.

ii)Active avoidance coping strategy: this involves temporarily alleviating stress by steering clear of particular situations, thoughts and emotions (Fenske, 2024). this temporarily reduces stress by avoiding certain situations, and feelings. Avoidance can also help you function and cope in the short-term, especially when faced with circumstances or problems that you can't fix or control (Grant et al., 2017).
Active avoidance coping strategies involve actively trying to avoid or escape from the stressor (in this case, infertility) or its emotional impact. Examples include:
Avoiding discussions: Steering clear of conversations about infertility (Smith, 2020).
Social withdrawal: Limiting interactions to avoid discussions about children (Jones & Brown, 2019).
Distraction: Engaging in hobbies or work to divert attention (Taylor et al., 2021).
Substance use: Using alcohol or drugs for temporary relief (White, 2018).
Avoiding reminders: Staying away from places that evoke feelings of infertility (Davis, 2022).
Denial: Downplaying the emotional impact of infertility (Miller, 2020).
Avoiding support groups: Steering clear of groups that address emotions (Johnson, 2021).
Suppression: Pushing away thoughts related to infertility (Lee & Kim, 2019).
While active avoidance coping strategies may provide temporary relief, they can also:
Limit support and connection, Increase feelings of isolation, Delay seeking medical or emotional help.

iii)Passive Avoidance coping strategy: Passive avoidance coping refers to feeling of helplessness to deal with the stressor and relying on others to resolve the stressful event or situation. Passive avoidance coping strategies involve passively avoiding or escaping from the stressor without actively trying to address or resolve the issue. Examples include; Emotional numbing: Feeling detached from emotions (Compas et al., 2018), helplessness, lack of communication, emotional Denial, avoiding education, inaction, procrastination (Henry, 2024)
Passive avoidance coping strategies can lead to: Increased emotional distress, Feelings of regret or "what ifs", Prolonged suffering.

iv)Meaning Based coping strategy: Meaning-based coping is defined as the positive reappraisal and reinterpretation of a stressor (Wenzel et al., 2020). meaning- coping is to find a sense of purpose or meaning in life despite dealing with difficult or stressful circumstances. Meaning-based coping strategies involve finding meaning, purpose, or significance in the experience of infertility, in order to cope with the emotional and psychological impact.

Examples include: Spiritual or philosophical beliefs: Drawing on spiritual or philosophical beliefs to find meaning and comfort, e.g; I believe that everything happens for a reason, and this is an opportunity for growth. “based, Personal growth: Focusing on personal growth and self-improvement, e.g; I'm using this time to focus on my career and personal developmen, mindfulness: e.g; I'm practicing mindfulness to stay present and centered during this challenging time, legacy: Finding meaning in leaving a legacy, e.g; I'm pursuing adoption to build a family and make a difference in a child's life (Anna- Frey et al., 2023).

2.1.5 Gender Differences in coping strategies used by infertile clients

infertile women used passive avoidance coping more frequently than other coping types, the use of meaning-based coping had positive impact on stress reduction, while use of active-avoidance coping increased infertility stress (aflakseir & zarei, 2016). Women are reported to suffer greater psychosocial distress and higher level of depression where as men report less distress and are able to adopt to childlessness better than Their partner.

On an individual level, active avoidance coping was positively correlated with a higher risk of depression or anxiety in women, while meaning-based coping was negatively correlated with risk in men. When the results of clients were viewed together, women and men using active avoidance coping exhibited higher risk as individuals (actor effect), as their partner. Women who used meaning-based coping had positive actor and partner effects. Women using active-confronting coping had a negative partner effect (Volmer et al., 2016).

Gender differences were clearly identified. Men were more inclined to have a meaning of life-seeking strategy. According to the conclusion of their results, this seemed to be a successful coping mechanism in which the individual could face and was able to tolerate the distress of involuntary infertility (Cserepes et al., 2015). Typical gender-specific coping strategies were demonstrated in the study of Peterson et al., too. Men's typical coping mechanism was distancing and self-control, while women preferred seeking professional support, seeking social support, and taking responsibility.

According to Yilmaz and Oskay (2017), Women used active-avoidance, active-confronting and passive-avoidance coping methods more than men. There were not significant differences between women and men in the use of meaning- based coping method.

2.1.6 Psychological Distress of Infertile Clients

Psychological distress is broadly defined as a state of emotional suffering characterized by symptoms of depression (e.g., loss of interest; unhappiness; desperateness) and anxiety (e.g., restlessness; feeling tense). It is also characterized by other somatic symptoms like; insomnia, headaches, and lack of energy that are likely to vary across different areas (Horwitz, 2022).

According to the Diagnostic and Statistical Manual of Mental Disorders (2022), psychological distress defines as “undifferentiated group of symptoms ranging from anxiety and depression symptoms to functional impairment, personality traits (confusing, troubling), and behavioral problems. Clients may feel emotions like anger, guilt, sadness, depression, anxiety, and loss of self-confidence and self-esteem. Anxiety, depression, and stress are the most common forms of psychological distress among infertile clients (Maroufizadeh et al., 2019), which are associated with poor marital quality and quality of life, lower compliance with fertility treatments, and adverse IVF outcome (Haimovici et al., 2018). Thus, psychological distress among infertility clients warrants considerable attention.

Anxiety: according to America Psychological Association [APA], (2024), Anxiety is an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure. Anxiety is a feeling of fear, tension, or worry that occurs as a response to real or perceived threats (Felman, 2024). Causes of Anxiety in Infertile Clients: Social pressure to conceive, stigma associated with infertility, financial burden of treatment, past traumatic experiences (e.g., miscarriage, failed treatments).Symptoms of Anxiety

in Infertile Clients: Difficulty sleeping or concentrating, irritability or mood swings, physical symptoms (e.g., headaches), Hypervigilance (e.g., excessive attention to fertility-related cues),Effects of Anxiety on Infertile Clients: Communication problems, Social isolation, Decreased self-esteem and confidence, Increased stress and tension.

Depression: Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest (Sawchuk, 2024). Also called major depressive disorder or clinical depression, it affects how you feel, think and behave and can lead to a variety of emotional and physical problems. Depression is one of the main mental problems associated with infertility (Tendias & Figueiredo, 2026). Depression symptoms in infertile clients can vary, grief and loss related to infertility, feeling of sadness and fear of never becoming a parent.

Stress: Stress is a normal part of life that can either help us learn and grow or can cause us significant problems. Stress releases powerful neurochemicals and hormones that prepare us for action (stöppler, 2024). Stress symptoms in infertile clients include: sleeping disturbance, always looking confused etc.

2.2. Theoretical Review

2.2.1 Transaction Stress Appraisal and Coping Theory.

This theory was developed by Richard Lazarus and Susan Folkman in 1984 and it states that, the way a person appraiseses a situation determines both stress reaction and coping efforts. Lazarus and Folkman believe that the way we interpret or react to an event can often have a more powerful impact on our stress level than the event itself. They developed a framework to help people to manage stressful situations using objective appraisal and coping strategies. They called it the Transactional Model of Stress and Coping. The model can be broken down into three key steps. These are:

Primary Appraisal – the impact the stressor will have on your well-being.
Secondary Appraisal – the resources that you have at your disposal that will help you to cope with the stressor. These might include internal resources (willpower, confidence, experience, and so on) or external resources (peer support, financial backing, or access to raw materials).

Use Coping Strategies – this might include problem-based strategies (information gathering, delegation, or confrontation), or emotion-based strategies (taking ownership or seeking moral and emotional support).

Application of the theory to the study
The key steps this theory highlighted are applicable to the study.
>Primary Appraisal
In the context of infertility, primary appraisal refers to how clients perceive the stressor (infertility). Clients may appraise infertility as:
Harmful: Threatening their relationship, self-esteem, and future plans
Irreversible: Perceiving infertility as an irreversible condition
Uncontrollable: Feeling powerless to overcome infertility
>Secondary Appraisal
Secondary appraisal involves evaluating one's ability to cope with the stressor. Clients may:
Assess their resources: Financial, social, and emotional support.
Evaluate coping options: Considering medical treatment, alternative family-building options, or lifestyle changes
>Use of Coping Strategies
Clients may employ coping strategies to manage the stress of infertility:
1.Problem-Focused Coping
Seeking medical treatment: clients may seek fertility treatment such as in vitro fertilization or sugery
Exploring alternative family-building options: clients can look out to other alternatives if treatment fails such as adoption, surrogacy or foster care
Seeking information: reading books, online research or attending workshops on infertility
2.Emotion-Focused Coping
Social support: clients seek for social support like talking to friends, family or a therapist about emotions and experience (Peterson et al., 2018).
Emotional expression: clients can express their through writing, art or counseling to express feelings (Unger et al., 2017).

Denial or avoidance: clients can avoid discussions or thought about infertility

Figure 1.

2.2.2 Task oriented, Emotion oriented and Avoidance-oriented Coping by Parker and Endler (1992) Theory.

Parker and Endler (1992) observed that many coping measures are characterized by methodological shortcomings which preclude generalization of results from one population to another. Their goal was to change this situation by introducing a new instrument based on three coping styles. The first two referred to problem- vs. emotion-focused coping (Lazarus and Folkman, 1984). Parker and Endler (1992) noted that problem-focused coping strategies are associated with a task-orientation, whereas emotion-focused ones reflect a person-orientation: "task-orientation refers to strategies used to solve a problem, reconceptualize it (cognitively), or minimize its effects" (Parker and Endler, 1992) and "person-orientation refers to strategies that may include emotional responses, self-preoccupation, and fantasizing reactions" (Parker and Endler, 1992,).

According to Parker and Endler (1992), many coping models distinguished a third basic dimension–avoidance-oriented coping, involving both task-oriented, and person-oriented strategies. Task-oriented avoidance is conceptualized as distraction, while person-oriented avoidance takes the form of social diversion. A person may avoid a stressful situation by engaging in substitute activities (distraction–e.g., watching TV) or seeking out other people (social diversion). "In task-oriented coping, the person is confronting the stressful task. In distraction coping, the person is substituting an alternative task of his or her choosing" (Parker and Endler, 1992,). On the other hand, social diversion is "person-oriented in that the individual tries to "lose himself or herself" by being with other persons rather than confronting the stressful situational task. To measure the three coping styles, Endler and Parker (1999) developed the Coping Inventory for Stressful Situations.

Application of the theory to the study
Task-Oriented Coping (TOC): This involves the active efforts to solve the problem or manage the situation. Infertile clients seek medical treatment (e.g., IVF), exploring alternative family-building options, lifestyle changes, joining support groups for clients with infertility.

Emotion-Oriented Coping (EOC): this Focuses on managing emotions and reducing stress. Clients avoid emotions associated with infertility through; Social support from family, friends, or support groups, Emotional expression through journaling, art, or counseling, Seeking emotional support from healthcare providers.

Avoidance-Oriented Coping (AOC): this refers to avoiding the problem or emotions associated with it. Clients with infertility avoid stuffs related to fertility through;Avoiding discussions about infertility with partner or others, Denial of infertility or its impact on relationship, substance abuse or other maladaptive coping mechanisms, avoiding medical treatment or fertility testing, social withdrawal isolation.

2.3 Empirical Review

2.3.1 Coping strategies used by infertile clients.

A study was carried out by Maduakolam and Agnes (2021), on coping strategies for infertility clients attending gynaecological clinic in southeastern Nigeria. A cross sectional descriptive design, a sample size of 120 was drawn from a population of 157 infertile clients , a purposive sampling technique and 127 questionnaire was used. Data were analyzed using statistical package for social sciences version 29.0. In their study, the coping strategies used were self-control (active confronting coping), escape avoidance (avoidance coping) and positive

reappraisal (meaning based Coping). Also, a total of 100 (85.5%) respondents admittedly used self-controlling strategy majorly by keeping their feelings to themselves 89.7%, and not letting others know how bad things are in their family 87.2%. The opinions of the respondents showed that on average, 59.8% adopted one or more forms of the escape-avoidance coping strategy. The most common form adopted by 80.3% was the refusal to believe that they cannot be pregnant or impregnate a woman. Majority of the respondents employed the positive reappraisal strategy while coping with infertility by trying to channel their effort to do something creative (85.5%) and to their career (76.1%). the respondents' responses on the use of social seeking support coping strategy indicate that 94.0% talk to someone about. Furthermore, 89.7% ask people that had previous infertility problem for advice, 88.9% read/listen or watch programs on television on infertility. the self-controlling coping strategy was the most dominant coping strategy used by the respondents and this was statistically significant when compared with escape-avoidance, positive reappraisal, and other ways of coping ($P < 0.05$).

A Study conducted by Ismail and Moussa (2018) in Damnahour city, Egypt, on the distribution of studied infertile women according to their coping strategy, Self structured questionnaire was administered, a descriptive research design and simple random sampling technique was used. A sample size of 154 individuals was used. Data analysis was done using statistical package for social sciences version 28.0. In their study, active-avoidance coping was moderate used by 44% of women, and low used by 41% of them. The active-confronting coping was moderate used by 42.5% of women and highly used by 37% of them. Passive-avoidance coping was highly used by 96.5% of women, while it was moderate used by 3.5% of them. The Meaning-based coping was highly used by 47.5% of women, and moderate used by 46% of them.

2.3.2 Gender Differences in coping strategies among infertile clients

A study was conducted by Stanton et al., (2017), on coping and adjustment to infertility in which relations between coping strategies and adjustment to infertility were examined among 96 women and 72 men, Self-structured questionnaire and descriptive research design and a systematic sampling technique was used. Data were analyzed using statistical package for social sciences version 20.0 In their research, the results showed the differences between Spouses' Coping and Distress. When sample site was controlled, spouses differed in their relative use of coping strategies. Wives were less likely than their partners to cope through distancing (escape avoidance) coping ($P< 0.05$), self-controlling (active confronting) coping ($P<0.05$), and planful problem solving ($P<0.005$). Wives were more likely than their husbands to cope through seeking social support ($P<0.005$). Spouses confronting coping scores were correlated positively, positive reappraisal was ($P<0.005$). A partner's coping was associated with the other's adjustment in only one case. Wives who used more self-controlling coping had husbands who were more distancing.

A study by Pottinger et al., (2015), On Gender Differences in Coping strategies among Clients with infertility at the University of West indies. A sample size of 52 clients (26 men and 26women), self-administered questionnaires, a descriptive cross sectional research design and random sampling technique was used. Data were analyzed using statistical package for social sciences version 11.0. The results of their studies showed that Women generally used all three types of strategies more often than men. The strategies that men used more often were those that allowed them to avoid talking about their experience, namely 'keeping feelings to themselves. Gender differences were found to be statistically significant for two of the coping strategies. More women engaged in excessive self-blame than men (32%, $P=0.01$). Also, significantly more women than men isolated themselves by keeping others from knowing their pain (44%, $P= 0.02$). It is noted that no one reported 'taking out their feelings on others', and while 17% of women reported avoiding encounters with pregnant women or young children, the men denied doing so.

2.3.3 Psychological distress of infertile clients

A study by Anokoye et al., (2017) on Psychological effects of infertility among clients attending St.

Michael's Hospital, Jachie-Pramso in the Ashanti Region of Ghana, a descriptive survey research design was used, a sample size of hundred clients and convenience sampling technique was also used. Closed ended questionnaires consisting of yes or no answers were used. Data analysis was done using statistical package for social sciences version 24.0. Their findings suggested that major effect of infertility is the feeling that their life has been put on hold, 28% indicated that infertility has led to low self-esteem while 17% mentioned stress and 15% mentioned depression.

A study was also carried out on Psychological Distress Among Infertility Patients: A Network Analysis by Cao et al., (2016). A cross sectional design was used with a sample of 740 individuals in which 51.2% were women and 48.7% were men, Self structured questionnaires consisting various sections using likert scale and simple random sampling technique were used. Data were analyzed using statistical package for social sciences version 20.0. Their findings revealed that some symptoms are more correlated than others, and that individual stress, depression, and anxiety symptoms are not equally important in the network. Connections within each symptom were higher than connections between symptoms. Neither network structure nor global strength differed between women and men. Even though a growing body of research has focused on depression, anxiety, and fertility-related stress among infertility individuals (Samani et al., 2018).

III. METHODOLOGY

3.1 Design

A descriptive cross sectional survey research design was used for this study, which is a scientific method that collects and analyzes data from a sample that represents the population of interest at a single point in time. This design measures the prevalence of outcomes or characteristics without manipulating or influencing it, providing a snapshot of the population's status (Scribbr, 2020).

3.2 Setting

The area of the study was Abubakar Tafawa Balewa University Teaching Hospital, Bauchi. It is located in the Dan Iya ward of Bauchi metropolis from the north western part of the town, from wunti market. The hospital has two main gates. The first one is directly opposite the patients market while the other gate is opposite Wunti market road. The hospital has sixteen (16) wards for admission of various cases which include medical wards, surgical wards and different wards in the maternity complex. The Teaching Hospital has two operating theatres, trauma centre, laboratories, dispensaries, immunization unit, intensive care unit, physiotherapy department, canteen, dialysis centres and mortuary. The Hospital has obstetrics and gynecological department which consists of gynaecological ward, gynaecological clinic, antenatal clinic, postnatal clinic, Special Baby care unit, pregnancy hypertension unit delivery suites and others. It also has different clinics like ear, nose and throat (ENT), eye clinic, dental clinic, obstetrics and gynaecology clinic to mention but a few.

The area for this study was the gynaecological clinic of the hospital. The unit has various staff like nurses, midwives, doctors, statistical record officers, ward attendants and cleaners. The clinic provide services including Antenatal care, Gynaecological cases, postnatal care, and infertility services.

3.3 Target Population

The target populations of this study comprised of all clients attending gynaecological clinic in Abubakar Tafawa Balewa University Teaching hospital Bauchi, Bauchi state. According to the health information record of gynecological clinic (2024), about 160 clients with infertility do attend the clinic every week

3.4 Sample Size

Taro Yamane's formula on population was used to draw sample for this study
N/1+N(e)^2. Where
N= total population
e= margin error of 0.05
160/1+160(0.05)^2
160/1+160(0.0025)

160/1+0.4
160/1.4
=114.2 ~ 114.
Therefore 114 sample will be used for this study.

3.4.1 Sampling Technique

Simple random sampling technique by the use of balloting was used as the sampling technique for this study. It was used because the clients who attend the clinic will be given an equal chance of being selected.
The inclusion criteria for this study was clients who attend the infertility unit of gynaecological clinic with inability to achieve conception for at least 12months duration who were willing to participate
The exclusion criteria for this study was clients who refuse to participate.

3.5 Instrument for Data Collection

Structured questionnaires designed from the review of related literatures that is adapted questionnaires was used as an instrument for data collection. The questionnaire was divided into four sections. Section A: cover the socio demographic information of respondents, while section B, C and D consist of questionnaire items base on the stated objectives that are meant to answer the various research questions of the study using a 4 degree Likert scale. The scale was: Strongly agreed (SA) = 4, Agreed (A) = 3, Disagreed (D) = 2, Strongly Disagreed (SD) =1 to express the respondent level of agreement to the questionnaire item. The questionnaire items number was 23.

3.6 Validity of the Instrument

The instrument was submitted to the research supervisor and two lectures from research committee of Aliko Dangote College of Nursing Sciences Bauchi for face and content validity, possible corrections and suggestions made was effected by the researcher before administrating the questionnaires.

3.7 Reliability of the Instrument

The reliability of the instrument was obtained by the researcher using test-retest method. The instrument was administered on a sample of similar characteristics in gynecological clinic, Specialists hospital, Bauchi, Bauchi state as a pilot study to obtain reliability in two different sessions, two weeks apart. The result was correlated and the reliability index is greater than or equals to 0.75, then the instrument was reliable.

3.8 Method of Data Collection

An introductory letter was obtained from the research committee of Aliko Dangote College of Nursing Sciences Bauchi. The letter was submitted to the head of the hospital and the ethical approval was presented to the head of gynecological clinic and obtain consent before starting the collection of data. The clients attend the clinic for consecutive four days and 10 clients attend the clinic every day that is 40 clients in a week and 160 every month. The purpose of the research and what it aims to achieve was explained to the respondents in order to obtain informed consent. Data was distributed over a period of four weeks by the researcher and research assistant through self-administered and researcher administered questionnaire in favor of those that cannot read and write. For the 1st, 2nd & 3rd weeks simple random sampling technique using balloting in which 7 out of the 10 individuals were selected everyday (those who picked yes) while for the 4th week, 8 and 6 individuals will be selected for 3 days and on the fourth day respectively. The questionnaire was retrieved instantly to ensure high return rate and sorted before analysis. Confidentiality of the respondents was ensured effectively.

3.9 Method of Data Analysis

Data obtained from the respondent was analyzed using Statistical Package for Social Sciences (SPSS) version 29.0 and the data was presented using frequency distribution tables and simple percentages for section A while mean and frequency distribution tables will be used for section B, C and D.

3.10 Ethical Considerations

An introductory letter was collected by the researcher from the research committee of Aliko Dangote College of nursing sciences Bauchi, and was

presented to head of Midwifery for permission. The letter was taken to Abubakar Tafawa Balewa University Teaching Hospital, Bauchi for approval and the approved letter was given to the incharge of gynaecological ward to allow respondents to participate in the research. The purpose of the research was explained and informed consent was 0btained from the respondents before administrating the questionnaires. All responses from respondents was kept confidential by the researcher and was treated with due respect and free from compulsion, participation is voluntary and respondents can withdraw at any time. Falsification and plagiarism was avoided and all information was used for academic purpose only.

Informed Consent: the participants was receive a comprehensive knowledge on the purpose of the research, benefits and risks.
Confidentiality: The participant's information was not disclosed to anyone to ensure privacy of the participant and the information obtained was used only for academic purposes.
Anonymous: the researcher was not reveal the identity of the participant under any circumstances.
Autonomy: the participant respect for determination was treated with dignity, ensuring their rights and decisions are prioritized.
Non-Maleficence: Potential harm to the participants was prevented or minimized thereby ensuring the participants physical, psychological and emotional wellbeing.

IV. RESULTS

This chapter deals with the presentation and analysis of data that was obtained through the questionnaire that were distributed to 114 respondents. 114 questions were retrieved meanwhile 10 were not filled correctly, 104 questionnaires were answered correctly and all the data were presented using frequency distribution table, percentage and mean.

SECTION A: Socio demographic data of the respondents

Table 4.1: Distribution Of Respondents Based On Their Socio Demographic Characteristics

Age	n	%
20-29	30	28.8
30-39	40	38.5
40-49	25	24.0
50 and above	9	8.7
Educational Background		
Primary	25	24.0
Secondary	70	67.3
Tertiary	9	8.7
Tribe		
Hausa	30	28.8
Fulani	20	19.2
Jarawa	30	28.8
Others	24	23.1
Occupation		
Civil Servant	30	28.8
Business	25	24.0
Farmer	10	9.6
Others	39	37.5
Cause of infertility		
Male factors	24	23.1

Female factors.	70	67.3
Combined factors.	10	9.6
Type of infertility		
Primary.	57	54.8
Secondary.	47	45.2
Duration of infertility		
1-5yrs.	60	57.7
6-10yrs.	25	24.0
11-15yrs.	9	8.7
16 and above.	10	9.6

Table 4.1 shows the that majority of the respondents falls within the age range of 30-39 40(38.5%) and also the table shows education background of respondents in which the majority are those that have secondary education 70(67.3%), followed by primary with frequency of 25(24.0) and tertiary 9(8.7%). More than half of the respondents falls under the Hausa and Jarawa tribe 30(28.8%) with the leading occupation of civil servants having a frequency of 30(28.8%), followed by 39(37.5%) of others. The table also depicts the causes of infertility of the respondents with three-fourth of them caused be female factors 70(67.3%) with the primary type of infertility being the major 54.8%(57) and 60(57.7%) of 1-5years as the major duration of infertility, followed by 25(24.0%) of 6-10years, 10(9.6%) of 16years and above and and least by 9(8.7%) of 11-15years.

Section B: Types of coping strategies used among clients with infertility

Table 4.2. Distribution Of Respondents Based on Types of Coping Strategies Among Clients with Infertility Attending Gynecological Clinic In ATBUTH, Bauchi state.

S/N.	Variables	SA	A	D	SD	Mean	Remark
1.	Keep my feelings to myself	24	40	27	13	2.7	Accepted
2.	Joining support groups	30	32	34	8	2.9	Accepted
3. Communicating openly with healthcare provider		43	25	29	7	3.1	Accepted
4. Leave when people talk about pregnancy and childbirth		15	14	60	15	2.3	Rejected
5. Avoid being with pregnant women/children		10	20	70	4	2.2	Rejected

Field survey (2025). Aggregate Mean= 2.64

Table 4.2 reveals that Clients with infertility agree with keeping their feelings to themselves (2.7). More than half of the clients disagree with leaving when people talk about pregnancy or children (2.3), and avoiding pregnant women and children (2.2) Clients with infertility strongly agree with joining support groups to connect with others facing similar challenges (2.9) and communicating openly with healthcare providers, asking questions (3.1) and seeking second options. These findings suggest that clients with infertility attending the gynecological clinic tend to value open communication with healthcare providers and may benefit from support groups, but may struggle with emotional expression and social situations related to pregnancy and children.

Section C: Gender differences In coping strategies trategies used among clients with infertility

Table 4.3: Distribution Of Respondents Based on Gender Differences in Coping Strategies Among Clients with Infertility Attending Gynecological Clinic In ATBUTH, Bauchi state.

S/N	Variable	SA	A	D	SD	Mean	Remark
1.	Sought medical advice	60	17	14	13	3.2	Accepted
2.	Wished infertility would go away	50	39	9	6	3.3	Accepted
3.	Throwing oneself into work	48	34	18	4	3.0	Accepted
4.	Self-care (meditation/relaxation)	45	40	10	9	3.2	Accepted
5.	Using substances (alcohol/drug	8	10	76	11	2.2	Rejected

Field survey (2025). Aggregate Mean= 2.98

Table 4.2 present that more than half of clients with infertility attending the gynecological clinic use seeking medical advice 60(3.2) as coping strategies. Also, Three-fourth of the clients use wishing the infertility would go away 50 (3.3), throwing oneself into work 48(3.0), and self-care such as relaxation techniques (3.2) as coping strategies. Majority of the clients do not use substances as a coping strategy (2.2). Women agree with mostly self care and wished the infertility would go away while some men strongly agree and agree with substance abuse as a way to distract them and keep their mind off. These findings suggest that clients with infertility use adaptive coping strategies like seeking medical advice and self-care, rather than maladaptive strategies like substance use.

Section D: Psychological distress among clients with infertility

Table 4.4: Distribution Of Respondents Based On Psychological Distress Among Clients With Infertility Attending Gynecological Clinic In ATBUTH, Bauchi state.

S/N	Variables	SA	A	D	SD	Mean	Remark
Feel sad about infertility's impact on relationships		60	25	10	9	3.3	Accepted
Feel pressured from family/friends to conceive		55	21	16	13	3.1	Accepted
Feel tense about my future due to infertility		65	10	19	10	3.9	Accepted
Feel calm/relaxed about infertility		10	8	77	9	2.2	Rejected
Feel worried about infertility's emotional impact on partner		50	15	24	15	2.9	Accepted

Table 4.4 indicate that clients with infertility attending the gynecological clinic experience significant psychological distress, including sadness (3.3), pressure from family and friends (3.1), tension about the future (3.9), and worry about the emotional impact on their partner (3.3) In minor cases, few of the clients feel calm and relaxed about their infertility (2.9). Furthermore, more than two-third of the respondents feel sad about the impact of infertility on their relationship, feel pressured from family and friends to conceive, feel tense about my future due to infertility, feel worried about the emotional toll of infertility on their partners.

4.5 Answering research questions

4.5.1 Research question 1: Types of coping strategies used among clients with infertility attending gynecological clinic in ATBUTH, Bauchi State.
Findings from this study portrays clients using adaptive coping strategies rather than maladaptive coping strategies (emotional coping strategies). The study also revealed that majority of the respondents reject leave when talking about pregnancy and children (2.3), avoid being with pregnant woman and children (2.2) but accept keeping their feelings to themselves(2.9) and communicating openly with health care providers, asking questions and seeking second options (3.2) and joining support groups in connecting with others facing similar challenges (2.3).

4.5.2. Research question 2: Gender differences in the use of coping strategies among clients with infertility attending gynecological clinic in ATBUTH, Bauchi state.

The study results revealed that women use emotion focus coping strategies such as wishing the infertility would go away somehow (3.4), self care e.g meditation and relaxation techniques (3.2), leave when talking about pregnancy and childbirth (2.3) while men use problem focus coping strategies such as sought medical care(3.2) throwing oneself into work, keep feelings to themselves (2.5), using substances e.g alcohol and drugs, communicating openly with health care providers, asking questions and, seeking second options (3.2).

Furthermore, study also shows that women experience significant anxiety and depression such as feel sad about the impact of infertility on their relationship (3.3) feel pressured from families and friends to conceive (3.4). Also men experience significant psychological distress as well such as feel worried about the emotional impact of infertility on their partners (3.3), feel tense about my future due to infertility (3.9).

4.5.3. Research question 3: Psychological distress among clients with infertility attending gynecological clinic in ATBUTH, Bauchi state.

The study findings reveals the psychological distress such as anxiety and depression among clients with infertility. Clients accept the statements; feel significant pressure from families to conceive 3.4), feel sad about the impact of infertility on their partners (3.3), feel tense about my future due to infertility (3.9), feel worried about infertility's emotional toll on my partner(3.3), but clients rejects the statement; feel calm and relaxed about my infertility (2.2). This indicates that clients attending gynecological clinic in ATBUTH do experience great deal if anxiety and depression.

V. DISCUSSION OF FINDINGS

5.1 Discussion of Findings

5.1.1 Socio-Demographic Characteristics Of The Respondents

Based on the data obtained the result shows that majority of the respondents are within the age of 30-39 which corresponds to 34.5%, and less than one-fifth of the respondents belongs to 50 and above corresponding to 8.9%. The results show that more than half of the respondents have secondary level of education with 67.4% while less than one-fifth of the respondents have primary and tertiary level of education respectively. The result also shows that majority of the respondents were civil servants, representing 28.8% and less than one fifth were Farmer corresponding to 9.6%. The results also show that more than half of the respondents has female factors as cause of infertility which corresponds to 67.3%, while less than one-fifth of the respondents have combined factors corresponding to 9.6%. The results show that more than two-third of the respondents were Jarawa and Hausa recording 28.8%, while less than one-fifth of the respondents were Fulani corresponding to 19.2%

These findings are in line with data obtained by Pottinger et al (2016), which portrays the age distribution of the respondents was slightly varied with respondents aged between 30 and 39 years comparatively higher (54.7%). Females (78.7%) constituted a majority of the participants. However, 47.0% and 45.3% were educated up to secondary and

tertiary levels respectively, and 74.4% belongs to others types of occupation.

5.1.2 Types of Coping Strategies Among Clients with Infertility

The study revealed that clients with infertility use various coping strategies, including seeking medical advice, wishing the infertility would go away, throwing oneself into work, and self-care. These findings are consistent with a study conducted by Madaukolam et al (2021), which reported that individuals with infertility use adaptive coping strategies to manage their emotions and stress, 85.5% of the respondents adopted the use of self-controlling coping strategies in dealing with their infertility challenges by trying to control their emotions, not letting others know how bad things are in their family and trying not to let their feelings interfere with other things they do. Self-controlling strategy enables the client to invest their own conscious effort, to solve personal and interpersonal problems, in order to try to master, minimize, or tolerate stress and conflict.

5.1.3 Gender Differences in Coping Strategies Among Clients with Infertility

The study found that there is significant gender differences in the use of coping strategies among clients with infertility. Female respondents reported using similar coping strategies, including seeking medical advice, wishing the infertility would go away and self-care. These findings correspond previous studies, which reported significant gender differences in coping strategies. A study by pottinger et al reported gender differences in coping included more women than men keeping others from knowing their pain ($p < 0.01$) and more women ruminating about what they did wrong to cause the infertility ($p < 0.01$). These strategies were also associated with reports of heightened distress ($p < 0.05$). Coping skills that were commonly used by both genders included seeking medical advice and engaging in wishful thinking.

A study carried out by Madaukolam et al (2021), also support these finding. There was also an observable significant association between the use of this strategy and the gender of the study participants ($P < 0.05$). The proportion of males who used the escape-avoidance coping strategy was greater than females. This corresponds with the findings of a study done in Nigeria which showed that most respondents, especially males (54.7%), used escape/avoidance coping strategy by drinking, smoking, and taking drugs to forget they are childless than the females.

5.1.4 Psychological Distress Among Clients With Infertility

The study revealed that clients with infertility experience significant psychological distress, including sadness, pressure from family and friends, tension about the future, and worry about the emotional impact on their partner. These findings are consistent with previous studies, which reported that infertility is a significant source of stress and anxiety. A study by Hazlina et al (2021) reveals infertility among females has a vast impact on psychological distress. In the current study, females with infertility have a 1.6 times higher risk of being psychologically distressed than those fertile. This is similar to a study in Taiwan, which found that 40.2% of the clients with infertility suffer from mental disorders. Infertility also contributes to the risk of having depression, with clients suffering from infertility having a 1.4 times higher chance of being depressed, whereas other studies showed 67.0% and 35.3% of women with infertility were depressed. Recent research has shown that prevalence can range from 11% to 27% and 73%.

Another study in Sweden reported that major depression was the most common disorder among couples suffering from infertility, with a prevalence of 10.9% in females and 5.1% in males. It shows that infertility increases the risk of depression. Therefore, it should be considered a serious warning and given a particular focus. Borght and Wyne in their study also reveals that Infertility can cause psychologically distress, emotionally stress and financial difficulties for both client. Typical reactions to infertility include shock, sadness, depression, anger and frustration, loss of self-esteem and self-confidence and a general loss of sense of control. Although infertility is not a life-threatening issue, it is still considered a stressful life experience for couples. The high stress of infertility might be attributed to the fact having a child is considered to be important in general society.

5.2 Implications of Findings to Nursing/Midwifery

The findings of this study have significant implications for midwifery practice. Midwives play a crucial role in providing emotional support and care to clients with infertility. The study's findings suggest that midwives should:

- Holistic care: Midwives can provide holistic care by assessing clients' coping strategies and providing individualized support.
- Emotional support: Midwives can offer emotional support and counseling to clients, promoting psychological well-being.
- Coping strategies education: Midwives can educate clients on effective coping strategies, enhancing their ability to manage stress and anxiety.
- Referral services: Midwives can facilitate referrals to mental health services or support groups when necessary.

5.3 Limitations of the study

The study was conducted among clients with infertility attending gynecological clinic in ATBUTH, Bauchi state. Due to time and financial constraints, this study was restricted to ATBUTH in order to have efficient and comprehensive information about the coping strategies among clients with infertility attending gynecological clinic in ATBUTH, Bauchi state.

5.4 Summary of the Study

The research assessed the coping strategies among clients with infertility attending gynecological clinic in Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Bauchi state. Chapter one discussed on background to the study, statement of the problem, research objectives/question in reference to the topic. Conceptual review, theoretical and literature/ emperical review from various sources was communicated in chapter two. Descriptive survey research design was used for this study; the population comprise all clients attending gynecological clinic in ATBUTH and simple random sampling technique was used to select the respondents. The sample size was derived using Taro Yamane's formula and 114 samples were found and only 104 were recovered after collection. The questionnaire used was an adapted questionnaire which have been validated by the researcher supervisor and the research committee of the college and the reliability index of 0.75 was found during the test- retest method. The findings were presented in chapter four using frequency, table, percentage and mean. This study investigated the coping strategies, gender differences in coping strategies, and psychological distress among clients with infertility attending a gynecological clinic. The study found that clients with infertility use various coping strategies, including seeking medical advice, wishing the infertility would go away, throwing oneself into work, and self-care. The study also found significant gender differences in the use of coping strategies and significant psychological distress among clients with infertility. Findings were also discussed in line with previous studies in chapter five.

5.5 Conclusion

Based on the findings, this study proved that clients use problem focus coping strategies as majority agreed with seeking medical care, communicating with health care providers, joining support groups. In this study, findings about gender differences in coping strategies indicates that female respondents use appraisal coping strategies while men use avoidance and appraisal coping strategies. They also experience high degree of psychological distress.

Infertility is a significant public health issue that affects millions of people worldwide. The findings of this study suggest that clients with infertility use various coping strategies to manage their emotions and stress. However, they also experience significant psychological distress. Midwives play a crucial role in providing emotional support and care to clients with infertility. The study's findings have significant implications for midwifery practice and highlight the need for midwives to provide emotional support and counseling to clients with infertility.

5.6 Recommendations

Based on the findings of this study, the following recommendations are made:

- Policymakers should prioritize addressing infertility-related psychological distress, through Integrated mental health services, counseling, and therapy. this is done by incorporating mental health professionals into fertility clinics and primary healthcare facilities, providing accessible counseling and therapy options, establishing support groups, promoting public awareness, educating healthcare providers, and funding research.
- Midwives should provide emotional support and counseling to clients with infertility to help them cope with their emotions and stress.
- Healthcare providers should encourage clients with infertility to use adaptive coping strategies, such as seeking medical advice, self-care, and social support.
- Healthcare providers should be aware of the potential psychological distress experienced by clients with infertility and provide appropriate referrals to mental health professionals.

5.7 Suggestions for Further Studies

The following suggestions are made for further studies:

- A longitudinal study to investigate the specific (occupational coping strategies) used by clients with infertility over time.
- A comparative study to investigate the differences in coping strategies used by clients with infertility in different cultural contexts.
- A study to investigate the effectiveness of different interventions, such as counseling and support groups, in reducing psychological distress among clients with infertility and the Impact on their partner.

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