Socio-Psychological Challenges of women having Polycystic Ovary Syndrome (PCOs)

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This is to certify that we have read the thesis submitted by Ms.Bushra Saleem. It is our judgment that this thesis is of sufficient standard to warrant its acceptance by the Quaid-i-Azam University, Islamabad for the award of the Degree of M.Phil in Anthropology.

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With heartfelt appreciation,

Bushra Saleem

DEDICATION

This thesis is dedicated to my parents and their endless love, support, and encouragement. I thank my parents and my supervisor for making this dream happen and giving me strength.

ABSTRACT

Polycystic ovary syndrome, also referred to as PCOS, is a common endocrine illness that affects women of reproductive age and is marked by hormonal disorders and the presence of many tiny cysts in the ovaries. While the medical symptoms of PCOS have received much research, the socio-psychological issues that women with PCOS experience have gotten less attention. This study intends to investigate the psychosocial implications of PCOS on afflicted women, providing light on the condition's often-overlooked social and emotional elements and to explore the lived-experiences of women with PCOS. The study aims to better understand the coping methods used by women with PCOS, as well as their perspectives on their identity and how they view themselves in the face of the syndrome's obstacles.

This study takes a phenomenological qualitative approach, with in-depth interviews serving as the major data gathering technique. The research was carried out in a variety of settings, encompassing urban and rural Chakwal in private clinics, in order to gain a full knowledge of the socio-cultural background impacting the lives of women with PCOS. To select participants, a purposive sample approach was used, assuring a diverse spectrum of opinions. The present study involved 40 participants with PCOS, ranging in age from 18 to 35 years old and from varied socioeconomic backgrounds. Respondents were chosen on the basis of their willingness to engage and their experience dealing with the socio-psychological consequences of PCOS.

The finding of present study shows that women with PCOS face significant emotional and social struggles, including anxiety, sadness, and concerns about their appearance. Many of them feel isolated and misunderstood by their communities because PCOS is not well known. The women in the study used different ways to cope, like seeking support from friends and family or educating themselves about PCOS. Society's expectations about beauty also play a big role in how people feel about themselves. Overall, this study highlights the importance of raising awareness and providing better support for women with PCOS. Understanding the intricate interaction between mental and social elements helps pave the way towards more comprehensive and compassionate care for persons suffering from this illness.

Key Words: Polycystic ovarian syndrome, socio-psychological, hirsutism, childlessness.

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List of Acronyms

AR	Androgen Receptor
BHMS	Bachelor of Homeopathic Medicine and Surgery.
BMI	Body Mass Index
DMH	Department of Mental Health
FSH	Follicle-stimulating hormone receptor
FAQ	Frequently Asked Questions
GnRH	Gonadotropin hormone-releasing hormone
IRB	Institutional Review Board
PCOS	Polycystic ovary syndrome
LH	Luteinizing Hormone

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CHAPTER 1: INTRODUCTION

This research looks at the impact of polycystic ovary syndrome (PCOS), a disorder affecting female hormones. It is estimated that between 10 and 25 percent of all women (Ali, 2019) suffer from polycystic ovary syndrome (PCOS), making it the most common endocrine illness affecting women of reproductive age. One in 100 women, or 5% of the female reproductive-age population, may be affected by polycystic ovarian syndrome (PCOS), making it the most common endocrine disorder in women. Symptoms of PCOS typically appear during adolescence. The name of the syndrome suggests that ovarian dysfunction is an important feature. PCOS is the leading cause of infertility due to ovulation abnormalities or absence (Franks, 2015). (Ghosh, Bandyopadhyay, & Chatterjee, 2020) state that poly-cystic ovarian syndrome is now understood to be a genetically complex endocrine disorder with an unknown aetiology and complex pathophysiology. It is believed that both genetics and environmental factors contribute to the onset of PCOS. An Anthropological Appraisal of Polycystic Ovarian Syndrome by Ghosh, Bandyopadhyay, and Chatterjee (2020) found that the pathophysiological process of PCOS is complex due to the various interrelated routes, including genetic variants, in the development of this condition.

The study relies on participants' own accounts of how they feel about and cope with living with a chronic illness. Personal health stories are important because they offer a perspective that can't be captured by strictly biological models of wellness and illness. Additionally, the socio-psychological difficulties that women with PCOS encounter are investigated. According to Lovallo (2005), the term "psycho-social" describes the interplay between social and psychological processes that have an effect on behaviour. Biological and psychological processes can interact with mental, emotional, and behavioural processes in the emergence of health and illness (Lovallo, 2005). The medical aspects of PCOS, such as hormone problems and ovarian cysts, have received extensive attention, but the social and psychological challenges faced by women who live with this condition have received far less attention. This study delves at the underexplored psychological and interpersonal effects of PCOS in an effort to better understand the devastating toll it takes on the lives of women with the disorder.

The majority of the published works on polycystic ovary syndrome (PCOS) have centred on the medical aspects of the condition, including diagnosis, treatment options, and fertility issues (Bozdag, Mumusoglu, Zengin, Karabulut, & Yildiz, 2016). However, few studies have examined the social and psychological components of PCOS in detail. The thoughts and actions

of an individual can have a positive or negative effect on his or her health and wellbeing (Manlove, 2011). People with PCOS may have trouble relating to others and themselves, as well as the wider world. Public health experts have noticed that the prevalence of metabolic syndrome illnesses including obesity and type 2 diabetes has been on the rise with globalisation and population growth rates in recent decades (Popkin, 1993).A deeper understanding of the socio-psychological issues these women face, such as those related to body image, self-esteem, social stigmatisation, and coping strategies, is necessary in order to provide comprehensive therapy and support.

In light of these knowledge gaps, we intend to investigate the less studied psychological difficulties that women with PCOS face. Our primary interest is in learning how PCOS affects women's psychology, lifestyle, and interpersonal connections. Our research aims to contribute to a more all-encompassing strategy for satisfying the needs of women with PCOS by shining light on these often-overlooked components, which include but are not limited to the women's medical requirements and their emotional and social well-being.

Key Terms

Multiple follicle cysts in the ovaries (PCOS)The endocrine disorder known as polycystic ovary syndrome (PCOS) is currently understood to be biologically complex, with a convoluted pathophysiology and a puzzling aetiology. In 1721, doctors discovered that a married woman who had been trying unsuccessfully to conceive had ovaries that were the size and shine of pigeon eggs (Insler & Lunenfeld, 1990). In 1844, another study on ageing ovaries was published (Chereau, 1844). Women with menstrual dysfunction, hirsutism, and enlarged ovaries full of small follicles were first diagnosed as Stein-Leventhal syndrome by Stein and Leventhal (1935). After the inaugural publication on the genetic basis of PCOS (1968) by (Cooper, Spellacy, Prem, & Cohen), study on PCOS became an intriguing issue. Polycystic ovary syndrome (PCOS) is the most common endocrine disorder in women of childbearing age, according to the medical literature. It is characterised by abnormal menstrual cycles, high levels of androgens, and the presence of extra ovaries, among other symptoms (Rasquin & Anastasopoulou, 2022).

1.1. Females of childbearing age are disproportionately affected by polycystic ovary syndrome (PCOS), a complex endocrine disorder. For anthropologists, polycystic ovary syndrome (PCOS) is a syndrome defined by the complex interplay of biological, interpersonal, and cultural factors that shape the experiences and perspectives of those affected across a wide range of sociocultural settings (Guzick, 2004).Anthropologically speaking, PCOS has not been culled out of the population despite the fact that it carries a number of health hazards. Instead, it takes into account the possibility of PCOS and related genotypes being chosen for (Ghosh, Chatterjee, & Bandyopadhyay, An Anthropological evaluation of polycystic ovary syndrome, 2023) as a possible explanation. Although these events may have benefited humans in the distant past, they have shown to be harmful in the present day. Ghosh, Bandyopadhyay, & Chatterjee, An Anthropological analysis of polycystic ovary syndrome (2020) note that the rising prevalence of PCOS around the world in virtually all ethnic groups is evidence of the syndrome's evolutionary genesis.

1.2. PCOS as a Syndrome 1.2

1.3. A syndrome is a collection of symptoms or abnormalities that typically manifest all at once and are thought to be caused by the same underlying medical condition. The term "syndrome" refers to a collection of symptoms that share a common cause (Marketinguae, 2020). A disease is a medical disorder that disrupts the healthy functioning of the body. The signs and symptoms of an illness are different for every condition. There are four broad categories of disease: infectious, genetic, physiological, and nutritional (Marketinguae, 2020). The symptoms experienced by a person are the key determinant of whatever term is used. A disease is defined as a medical condition for which there is a known and specific explanation. On the other hand, a syndrome (from the Greek for "run together") can bring on a wide range of symptoms without any single cause being apparent. Diseases are chronic conditions, while syndromes are collections of symptoms (Marketinguae, 2020)

1.4. Despite the lack of a universally accepted anthropological definition for the term "syndrome," certain disorders have limited global distributions because they result from unique combinations of ecological and cultural elements. We refer to conditions like this as cultural syndromes. Some cause very minor symptoms, while others can be quite serious or even fatal (Medical Anthropology: Culture-Specific Diseases, 2017). Nichter came up with the concept of idioms of distress in response to culturally specific symptoms that were thought to be exclusive to certain societies (Simons & Hughes, 2012). In the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders, the idea of culturally specific disorders gained traction in the field of psychiatry. On the other hand, Nichter and other anthropologists were concerned that these symptoms were being portrayed simplistically as fixed entities, without any ability to probe how events were getting globalised via media and medical psychiatry (Kaiser & Jo Weaver, 2019). On the other hand, research into idioms of distress provides an alternative to categorising and reifying culturally specific kinds of anguish. Many research have used this idea to highlight non-biological circumstances in which people understand, express, recognise, and react to pain (Kaiser & Jo Weaver, 2019).

1.5. Difficulties of a Social and Psychological Nature

Social psychology is the "primary field of study" (McLeod, 2023) concerned with understanding how individuals' mental processes are shaped by their interactions with others, both in real life and in their imaginations. Baron, Byrne, and Suls (1989) define social psychology as "the scientific area that seeks to explain the root causes of individual behaviour in social circumstances" (p. 6). Hegel (1770-1831) articulated the idea that the development of the social intelligence is intrinsically linked to the progress of society. This resulted in the idea of a group mind, which is central to social psychology. At the turn of the twentieth century, authors began publishing the first works in the field of social psychology. McDougall published the first significant book in English in 1908, and its content on feelings and sentiment, ethics and character, and religion was very different from what is considered standard today (McLeod, 2022).

Despite its classification as a medical condition, polycystic ovary syndrome (PCOS) presents not only physiological but also psychological and social difficulties for women who suffer from it (Moreira, Soares, Tomaz, Azevedo, & Maranhao, 2010). Stress, sexual dysfunction, and a lack of confidence in one's female role are all symptoms of PCOS that have been linked to the development of depression and isolation. Since PCOS is such a serious mental health issue for women, the authors stress the importance of interdisciplinary care for these patients. Research on the psychological and social aspects of polycystic ovary syndrome (PCOS) has increased in recent years, but is still insufficient (Moreira, Soares, Tomaz, Azevedo, & Maranhao, 2010). Women with PCOS had a higher rate of sadness (27.3% vs. 18.8%) and anxiety (50% vs. 39.2%), as well as a higher score for perceived stress (1.01 0.03 vs. 0.88 0.01), compared to women without PCOS. Women with PCOS had significantly higher rates of depression, anxiety, and stress, even after adjusting for body mass index, infertility, and socioeconomic factors. Damone et al. (2018) found that stress mediated the relationship between PCOS and both depression and anxiety. Teens with PCOS are more likely to use terms like "geek" or "freak" when describing themselves, as the disorder's physical manifestations might make them feel alone. Teens with PCOS scored higher on anxiety scales than their healthy peers, according to the limited research that was conducted. Concerns about physical appearance, body image, and potential infertility were linked to anxiety in adolescents with PCOS, according to research by Dowdy (Dowdy, 2012).

1.6.PCOS: A Worldwide Viewpoint, Section 1.4

1.7. The estimated prevalence of PCOS in Europe is 2,764 cases per 100,000 people, according to a paper published in lancet regional health Europe. The reported frequency of PCOS is between 5% and 18% worldwide. About 40% of women either don't know they have PCOS or were diagnosed too late. The importance of reevaluating PCOS's care and needs is greater than ever due to its widespread occurrence or underdiagnosis (health-Europe, 2022). According to the World Health Organisation (3.4% of all women worldwide), PCOS affects an estimated 116 million people worldwide. The chance of developing polycystic ovary syndrome (PCOS) is increased by a combination of genetic, neuroendocrine, lifestyle/environmental, and overweight/obesity factors. Poor follicular growth and an elevated risk of linked co-morbidities such as endometrial cancer and type II diabetes are at the centre of the pathophysiology of polycystic ovary syndrome (PCOS) (Bulsara, Patel, Soni, & Acharya, 2021). Research from 2021 estimates that at least 56% of women with PCOS also have mental health concerns, with 40% experiencing depression and 166% having mood disorders. Possible causes include low self-esteem brought on by hirsutism and the difficulties of dealing with the side effects of the birth control pill, which is commonly prescribed to alleviate the condition. In addition, women of reproductive age can experience considerable psychological consequences from infertility, including psychosocial distress (health-Europe, 2022).

PCOS at 1.5: A Pakistani ViewThe most common endocrine disorder, polycystic ovarian syndrome (PCOS) affects somewhere from 4-18% of women of reproductive age worldwide. Unfortunately, approximately 52% of Pakistani women deal with polycystic ovary syndrome (PCOS) (health, 2022). Pakistan has half its population suffering from the sickness, yet there is a lack of effective management and awareness activities for the issue. Women in Pakistan have voiced a number of concerns, including: Medicolegal omissions, Unfortunately, most gynaecologists in Pakistan have a bias towards pregnant women and make distinctions between "married" and "unmarried" patients. As a result of this bias, young patients often do not receive proper treatment, and their condition may linger undiagnosed for a long time. The health effects for women increase as a result of this condition's progression (health, 2022). Despite the fact that PCOS is a hormonal disorder, many women in Pakistan avoid getting help for it. Again, this is coupled with sex illiteracy and the stigmas that surround sexual wellness. Considering cultural taboos, it can be challenging for women in Pakistan who suffer with PCOS to seek help from medical specialists. Fear of stigma discourages women with irregular or delayed menstrual cycles or other PCOS symptoms from seeking treatment (health, 2022).

Among 440 women of childbearing age from across Pakistan, 62.3% were diagnosed with polycystic ovary syndrome (PCOS). Management of obesity in PCOS is challenging and untreated, which becomes problematic in the future (Farrukh, sidra, Tariq, & Mohsin, 2019), and 80% of participants were obese, 77.7% had hyperandrogenism, 60.9% had diabetes, and 33.2% had infertility concerns owing to PCOS. There needs to be more research done on the genetics and aetiology of PCOS so that potential risks and treatment options can be anticipated.

1.8.Definition of The Catch

In women of childbearing age, PCOS is a prevalent endocrine disorder. Few studies have addressed the psychological effects of PCOS, instead focusing on its physical manifestations, such as hormone imbalances and ovarian cysts. There is still a dearth of awareness of the socio-psychological challenges that women with PCOS face, despite the fact that some study has focused on mental health issues. Due to this lack of research, we still don't know much about the socio-psychological effects of PCOS on women's mental health, sense of self, and interpersonal relationships.

1.9. This research will investigate the social and mental health challenges faced by women who have polycystic ovary syndrome (PCOS). It will focus on the ways in which women with PCOS deal with the challenges it presents, as well as their thoughts on their own identity and physical attractiveness. The purpose of this research is to fill a gap in our understanding of PCOS by focusing on its non-medical features and their impact on women's quality of life.

1.10. It is essential to provide holistic care for women with PCOS by first gaining an understanding of the social and psychological challenges they confront. Anxiety, depression, and issues with one's body image can all have serious consequences for a person's general health and quality of life. In addition, social stigma and a lack of understanding about PCOS can leave these women feeling alone and confused. This study delves at the psychological and social effects of polycystic ovary syndrome. By delving into the social and psychological aspects of PCOS, we can better understand how to treat it, spread awareness, and provide a supportive environment for women who suffer from it.

1.11. Objectives and Research Questions

The primary purpose of this research is to provide insight into the lived experience of a woman with polycystic ovary syndrome (PCOS), including the underlying causes of the disorder and the associated social and psychological difficulties. The meaning of life on their own terms. To

investigate hypothesised biological and mental underpinnings of polycystic ovary syndrome. The primary aim is to learn more about the emotional lives of PCOS-affected women.

This topic takes a broad view of the individual experience, including the role of perception and the subjectivity of perception. After reviewing a large body of literature on polycystic ovary syndrome (PCOS), the author concluded that the few qualitative approaches that did exist only served to highlight the dearth of original PCOS narratives. Therefore, the researchers in this study sought to illustrate women's perspectives, understandings, and experiences with PCOS. Experiences ranging from narratives, memories, and emotions connected to PCOS to more tangible physiological experiences, such as symptoms, were of interest to the researchers. This factored into the auxiliary inquiry on how women felt about their PCOS and whether or not they felt it was a daily presence in their life.

This study aims to first document the social and cultural stigmas associated with PCOS using literature and participants' subjective views, and second to highlight the family perception and societal stigma associated with PCOS.

To achieve this goal, we have looked at the taboo nature of PCOS and the stigma that surrounds it. We have also investigated how family members view body image and its associated difficulties in maintaining self-regulation. It is similarly vital to understand how PCOS is viewed in the community, as this can be a source of worry and anxiety for individuals. The purpose of this study is to learn more about the cultural beliefs and stigmatisation that women with PCOS face, and how these factors affect their relationships with others. The goal of this study is to better understand the role of support systems and social networks in aiding women in coping with the socio-psychological challenges of PCOS.

The next step is to talk about the patients' preferred form of treatment, whether it be biomedical or not. Last but not least, this research aims to: • investigate the various approaches to PCOS treatment.

This inquiry has examined the approach to treating PCOS and living with the condition on a daily basis. The goal of this research was to examine alternative therapeutic modalities and their potential synergy with biomedicine. Researchers conducted in-depth interviews to learn more about the lived experience of PCOS and the factors that contribute to or mitigate its symptoms. The primary inquiry part is on primary care and polycystic ovary syndrome. It was assumed that most women would have contact with the healthcare system at some point in their lives, and that these experiences would provide fertile ground for storytelling. Knowing the

role of biomedical in PCOS understanding and control was especially interesting given that bio-medicine is the institution through which PCOS is acknowledged. In order to help healthcare providers and policymakers better meet the health and social-emotional support requirements of women with PCOS, we provide the following suggestions. Add to the existing body of knowledge on PCOS by stressing the importance of medical care and research practises that take into account the social and psychological aspects of the disorder. When examining health behaviours, medical systems remained a crucial medium providing context. However, that wasn't the case everywhere. The second sub-question focuses on routine actions and behaviours that women may engage in to control PCOS, such as medication, lifestyle adjustment, herbal treatment, or diets, as these are the methods relied on by the majority of respondents.

Importance of Research 1.21

This study's significance lies in the fact that it examines the social and psychological challenges faced by women who have polycystic ovary syndrome (PCOS), a common endocrine disorder affecting women in their reproductive years. Although the physical manifestations of PCOS are well-known, the psychological and interpersonal effects of the disorder have been less studied. The purpose of this research is to shed light on the understudied areas of PCOS's impact on women's mental health, sense of self, and interpersonal relationships.

It is crucial to learn more about the social and psychological challenges faced by women with polycystic ovary syndrome (PCOS). The purpose of this research is to provide information on the mental health effects of PCOS, such as emotional difficulties, body image worries, and coping strategies. Since discussions about PCOS tend to focus on its medical aspects, this article intends to make a contribution to medical anthropology as a whole. The results may have far-reaching implications for the healthcare industry, academia, and politics, potentially prompting a more comprehensive approach to addressing the needs of women with PCOS.

On a more micro level, this research matters for women with PCOS because it gives a platform to their experiences and concerns beyond the scope of their disease. The study looks into the socio-psychological dimensions of their difficulties in an effort to legitimise them and provide a platform for them to be understood and accepted. The research also suggests that it could help PCOS women feel less isolated and less guilty about their condition. In addition, the study's results could be used to develop individualised treatments and resources for women with

PCOS. Health care providers can help PCOS women have a more positive and empowering experience by learning about their coping strategies and networks of support.

In conclusion, this study's significance lies in its ability to fill a gap in our understanding of the socio-psychological challenges associated with polycystic ovary syndrome (PCOS), thereby making a significant contribution to medical anthropological research, and in its value to women who suffer from PCOS by offering them validation, understanding, and the possibility of receiving better support and care. It's not just the woman who suffers and has psychological and social difficulties with a diagnosis of polycystic ovary syndrome (PCOS); the patient's family does, too. Through research, we can learn how to better assist PCOS patients and their families by developing a wide range of therapeutic options. In conclusion, PCOS research is essential for addressing the large public health burden of the illness, as well as its causes, current treatments, and diagnostic methods.

Constrictions 1.22

Since this is a qualitative study employing a phenomenological methodology, the sample size may seem low. While the depth and breadth of the information gathered from the sample is amazing, it may not be applicable to all women with PCOS. It's possible that the authors' points of view don't reflect the whole range of PCOS members' lived experiences. From an anthropological perspective, it's important to consider how lifestyle factors like diet and exercise affect polycystic ovary syndrome (PCOS).

The purpose of this research was to gain an in-depth understanding of the unique emotional, social, physical, relational, and coping-related difficulties experienced by women with PCOS. The research relied heavily on in-depth interviews as its primary source of information. The researchers aimed to recruit a diverse sample of women with PCOS from different racial and socioeconomic backgrounds and locations. This version was created so that a wide range of perspectives and experiences within the PCOS community might be represented. In conclusion, this study contributes to anthropological literature.

The role of social support networks in aiding women with Polycystic Ovary Syndrome (PCOS) to cope with the syndrome's problems should be explored in future studies of the syndrome's socio-psychological difficulties. Examine the role of close friends, medical experts, and virtual communities in enhancing health and quality of life. Through in-depth interviews, learn how PCOS-related stigma affects women's sense of self-worth. Find out if PCOS women are treated differently in terms of access, quality, and outcomes. Learn if there are any differences in

diagnosis, treatment options, and comprehensive care based on socioeconomic position, race/ethnicity, and geography. Psychological outcomes, self-care routines, and overall quality of life can all benefit from psychoeducation, counselling, and interdisciplinary treatments, the consequences of which will be measured. By focusing on these areas of research, we can learn more about the social and psychological challenges faced by women with PCOS and come up with solutions to help them feel better physically and emotionally.

Thesis Structure, Section 1.23

The purpose of this research is to examine the personal and social effects of PCOS through the lens of qualitative research methods, namely those employed in the field of medical anthropology. This paper is divided into six sections, each of which contributes to the overall goal. In the first chapter, we look at the biomedical history of PCOS and the ways in which women with PCOS seek health care, as well as how they and their communities see the challenges they confront. Medical anthropology's emphasis on a diverse healthcare system is explored as well. The conceptual and theoretical foundations of the literature on causes, symptoms, local perceptions, and treatment strategies are laid out in Chapter 2. The literature review provides a comprehensive summary of previous studies on PCOS, with an emphasis on the medical elements and a glimpse into the social and psychological effects. The researcher's hometown of Chakwal serves as the focus of the region profile and data gathering methodologies described in Chapter 3. Our technique is described below; we take a qualitative approach by conducting in-depth interviews with 40 women with PCOS from various socioeconomic and geographical origins. These interviews shed light on the participants' internal struggles and coping mechanisms in the face of external social and emotional pressures.

Chapter 4 covers the study's field data, describing women's interactions with biomedicine and how they have changed since they were first diagnosed with PCOS. The implications of the diagnosis affect every area that will be studied from here on out. The results that follow provide a detailed picture of the emotional and social challenges faced by women with PCOS. We investigate how they have dealt with this stress and the ways in which they have responded. The results are followed by a thorough discussion and analysis that places the findings within the perspective of the larger body of literature and provides potential implications for healthcare providers. Finally, the research finishes with a persuasive demand for increased knowledge and enhanced support systems to successfully treat the social and psychological

aspects of PCOS. In the end, we hope to see a shift towards a more compassionate and all-encompassing approach to the treatment and general well-being of women with this condition.

CHAPTER 2: LITERATURE REVIEW

PCOS, or polycystic ovary syndrome, is a common endocrine disorder affecting women of childbearing age. Although polycystic ovary syndrome is most often associated with hormonal and metabolic abnormalities, its effects can be seen in other areas of life as well. The goal of this literature review is to examine and synthesise the most up-to-date studies on the social and psychological challenges faced by people with polycystic ovary syndrome (PCOS). By shining a focus on these issues, this study highlights the importance of comprehensive medical care and assistance for women with PCOS, allowing for a more holistic approach to their well-being.

Causes of polycystic ovary syndrome (PCOS) and how people perceive it are examined in this chapter. Topics covered include symptoms, stress, anger, lived experiences, and genetics. Family and community perspectives, societal stigmas associated with PCOS, and anthropological perspectives on body image are all topics that have been studied in the literature. Finally, biological and alternative approaches to PCOS therapy and management have been reviewed in the literature.

In 1935, two Americans named Stein and Leventhal described polycystic ovarian syndrome for the first time. Hormonal imbalance and ovarian cysts were found in a group of seven women, causing amenorrhea. Poly-cystic syndrome was originally known as stein-Leventhal syndrome (Darby, 2017). Before 1950, doctors believed that the only way to treat Stein-Leventhal syndrome was through surgical removal of the ovaries. However, as more was learned about the illness, doctors were able to identify and implement additional methods of care (Darby, 2017). Other than psychology and biology, sociology and anthropology have received less focus in the prior literature on PCOS, leading to a dearth of empirical research. Pathak (2015) investigated the anthropological perspective on PCOS in India, and only two or three research were conducted in the sociological field (mainly by Kitzinger & Willmott and colleagues (2002; Snyder, 2006). There is a dearth of literature on teenage PCOS in Rawalpindi, Pakistan, despite the country's emphasis on sociology. This is especially true for qualitative investigations. Further research into PCOS is warranted because there is a glaring void in the existing literature. This study on PCOS uses the qualitative approach popularised in medical anthropology to fill this knowledge gap.

Anxiety, tension, and despair are just some of the emotional difficulties that have been studied among women with PCOS. We need studies of women with PCOS that focus on their

experiences as well as their physiological symptoms. Finally, our research has centred on how women are handling and managing this illness. Because PCOS patients often struggle with weight, leading to altered body images and encountering new cultural standards of beauty as a result.

2.1. PCOS: My Own Experience and Thoughts on Its Causes

2.1.1. Causes and Effects

The literature suggests that PCOS has no single, identifiable origin. There is evidence that genetics play a role in PCOS, according to a paper from the Cleveland Clinic, but insulin resistance, high levels of male hormones like testosterone, and low-grade inflammation are all major culprits. Acne, hair growth (particularly on the face, chest, and other body regions), and a failure to release eggs from the ovaries are all symptoms of elevated androgen levels in women. However, elevated insulin levels cause an increase in androgen, which in turn contributes to insulin resistance and other PCOS symptoms. To put it another way, once a body becomes obese, it is quite difficult to get rid of the excess fat. In order to determine whether or not a patient with polycystic ovary syndrome (PCOS) has low-grade inflammation in their blood, doctors run a C-reactive protein test and monitor white blood cell level (Cleveland clinc, 2023) in order to do so.

Jean and Haile state in their report on women's health that, while the specific origin of PCOS is unknown, genetics play a part and family history is also significant. Insulin and androgens (male-type hormones) tend to be elevated in women with polycystic ovary syndrome. The vast majority of women with polycystic ovary syndrome (PCOS) are overweight, with 95% falling into that category, while 75% are underweight and insulin resistant. PCOS is characterised by amenorrhea, insulin resistance, infertility, and hirsutism, as evaluated by endocrinologists Marx and Mehta (2003). Pathophysiological factors include hyperinsulinemia, insulin resistance, and abnormalities in gonadotrophin, androgen, estrogenic, and other hormones. In PCOS patients, the ratio of luteinizing hormone to follicle-stimulating hormone increases to 2.5 or more even during the ovulatory cycle, according to a review of hypothalamic-pituitary abnormalities (Marx & Mehta, 2003). Inappropriate release of gonadotropin hormones (GnRH) from the hypothalamus is also a contributing factor in the development of polycystic ovary syndrome (PCOS; Marx & Mehta, 2003). Marx and Mehta, in describing the dangers over time, mention that PCOS is associated with metabolic risk. Twenty percent to forty percent of lene and obese women with PCOS are at increased risk for developing type 2 diabetes in later

decades, as well as for developing chronic artery illnesses and endometrial ovarian malignancies (Marx & Mehta, 2003).

According to Spencer (2022), PCOS can manifest in a variety of ways in the human body. Extra ovarian follicles are a symptom of PCOS, however they are not present in all women with the disorder. Some women have quite heavy periods, while others have very mild ones; some women have long gaps between periods, while others have them every few days. You should also think about other symptoms, such as insulin resistance, hirsutism, acne, male pattern baldness, and so on. Spencer (2022) notes that while acne and other skin issues are often what prompt women to seek medical attention, it's important to be aware of the full scope of PCOS's effects, including sleep disturbances, infertility, miscarriages, diabetes type 2, depression, anxiety, endometrial cancer, obesity, metabolic syndrome, heart disease, fatty liver, and complications during pregnancy.

1.55 million women of reproductive age worldwide have PCOS, leading to 0.43 million disability-adjusted life years, according to a review of the scientific literature on the topic. Although PCOS can occur at any age, it is most commonly diagnosed in women between 20 to 30 (Asghari et al., 2022). The prevalence of PCOS in the Middle East and North Africa is disproportionately high, according to the same survey. As a society's infrastructure and population grow, so does the load they carry (Asghari et al., 2022). The World Health Organisation (WHO) has estimated that 3.4% of women worldwide, or 116 million women, are afflicted. Previous reports suggested 9.13% prevalence and knowledge among South Indian adolescent and young girl, however this number is likely much higher currently in 2019. Lifestyle, genetic, environmental, and other factors, such as onset after puberty in early adulthood, may all play a role. In contrast, 6.8% of women were diagnosed with PCOS and receiving treatment in 2019 (Yamini et al., 2019), whereas 78.4% of women did not know what PCOS was. Among 440 women of childbearing age from across Pakistan, 62.3% were diagnosed with polycystic ovary syndrome (PCOS). Management of obesity in PCOS is challenging and untreated, which becomes problematic in the future (Farrukh, sidra, Tariq, & Mohsin, 2019), and 80% of participants were obese, 77.7% had hyperandrogenism, 60.9% had diabetes, and 33.2% had infertility concerns owing to PCOS.

2.1.2. Anxiety, rage, and melancholy

According to research by Deeks, teede, and Gibson-Helm (2010), PCOS is a major contributor to mood swings, anxiety, and depression in women. In their review of PCOS, Himelein and

Thatcher (2006) discovered associations between the disorder and a number of psychological distresses, negative body image, negative impacts on women's quality of life, sexual inactivity, and obesity. Women with polycystic ovary syndrome have an increased risk of psychological discomfort, according to the findings of a recent analysis. Hirsute is a common symptom of polycystic ovary syndrome (PCOS), and studies on the condition have shown that women with the condition often seek out laser therapy to treat hair loss and related psychological issues (Himelein & Thatcher, Polycystic Ovary Syndrome and Mental Health: a review, 2006). About two-thirds of women with PCOS are overweight, and researchers have found that this can lead to depression (Himelein & Thatcher, Polycystic Ovary Syndrome and Mental health: a review, 2006).

Once a lady learns to control the symptoms of PCOS, things get better, as Cliff Medling explains when telling her wife's tale. According to Medling, "Amy's (his wife) going through PCOS and their path is longer one and lots of moodiness which become a challenging and they overcome for their own ease. PCOS does cause a lot of discomfort and sensitivity in women, as well as other problems including moodiness and emotional harm. Amy has improved our relationship by making positive changes to her lifestyle, food, and self-care. I'd like to say how impressed I am by how hard she worked despite the strain of PCOS to manage our business, our three kids, the meals we ate together as a family, and the volunteer work she did for various organisations. When she suddenly became angry and unpleasant, I was frustrated; however, after learning about polycystic ovary syndrome (PCOS), I changed my opinion, as well. Why is she so irritable? I wondered before I asked. And then I'll know whether you need to take a break and regroup.As stated by (Medling, 2017)

According to a study by Hadjiconstantinou et al., infertility is a leading cause of anxiety in women. The study's participants described how PCOS symptoms cause distress and influence their self-image: "... when I did want to wear anything nice, I didn't have anything nice to wear anyway because I was too fat to have anything nice." Cultural norms may have had a role in the perception of stigma, and infertility may be viewed differently depending on one's cultural background. Women's anxiety has been linked to an increased risk of developing type 2 diabetes, but some residents of South Asian countries dismiss this as irrelevant because nearly every man in the region is predisposed to the disease (Hadjiconstantinou et al., 2017).

Women with polycystic ovary syndrome (PCOS) were the focus of a quantitative study conducted in Lahore, Punjab, Pakistan. The study's authors aimed to determine how PCOS

patients rated their health on three dimensions: their own ability to control their situation, the influence of others, and the influence of their own environment. This is according to a new study (Fatima, Yaqoob, Jamil, & Butt, 2021).

2.1.3. Real World Attempt

Normalising discourses about the body are one way bio-power regulates life, as argued by Foucault (1984). To my knowledge, Pathak's (2015) work is the only ethnographic study of PCOS as a lifestyle disease in Mumbai, and in it, she changes the focus from the individual's subjective experience to the modern lifestyle that is a product of globalisation and urbanisation. She made a connection between PCOS and broader social and global trends. She looked into the connections between PCOS and shifting social mores, chaos, and development (Ali, 2019).

According to Ali (2019), women with PCOS have both unpleasant and positive life experiences. Allopathic medicine and homoeopathy both have their origins in cultural perspectives on health and illness. The concept of sickness as illness and healing as equilibrium is crucial. PCOS patients should strive for a healthy dietary and lifestyle balance. She met a variety of women who have deep, nuanced understanding. Friends, family, and the community at large all have a role in disseminating information and attitudes about PCOS. They were mutually innovating and creating the habitus of PCOS conditions. She also looked into the fact that many women with PCOS initially experience emotional discomfort and sadness, but eventually come to embrace it as a normal part of life. To see PCOS as something to be managed, rather than fought, is the biggest obstacle to changing people's cultural, medical, and societal perceptions of the disorder (Ali, 2019). "The Best Thing You Can Do for Yourself Is Lose Weight": Polycystic Ovary Syndrome and Disordered Eating Greenhalgh (2016) argues that the "war on fat" has failed to achieve its intended public health aims. His thesis is valid for Canada as well, even though he focuses on the US in his writing. Greenhalgh (2015) writes that the nation's "fight against fat" has contributed to an increase in eating disorders, particularly among young women. She contrasts the terms "disordered eating" and "eating disorders" to highlight the heterogeneous nature of these conditions: "I was struck by the difficulty of differentiating between the subjects with (diagnosable) eating disorders and those who showed'merely' severely disordered diet, exercise, and thought patterns. The difference appeared to be in degree rather than in kind" (Greenhalgh, Disordered Eating/Eating Disorder: Hidden Perils of the Nation's Fight aga

Vleming says, "When I was first diagnosed, I went to an endocrinologist, who informed me that the greatest thing I could do for myself was to reduce weight," in two interviews in which women describe being encouraged by their doctors that losing weight would be helpful after being diagnosed with polycystic ovary syndrome (PCOS). And I think I listened to that counsel, even though I was bigger back then than I am now. Vleming (2018) quotes me as saying, "This is the greatest approach to deal with all of this, including diabetes prevention (Ruth)" In order to quantify the extent to which women in Saudi Arabia's Al-Ahsa are aware of PCOS, researchers surveyed 394 women between the ages of 18 and 50 (Alkhamis et al., 2021). According to a survey, 86.27 percent of women between the ages of 18 and 29 who have heard of PCOS believe that it is genetic and that PCOS treatment lowers cancer risks.

From September 2017 to March 2018, researchers surveyed female students at Sarojini Naidu College for Women in Kolkata, West Bengal. Undergraduate students aged 18 to 20 were randomly recruited for the cross-sectional survey design study (Chatterjee & Bandyopadhyay, 2023). A study found that 18.51 percent of participants with PCOS experienced hirsutism, 85.18 percent had menstruation issues, 40.74 percent had acne, and 63 percent struggled with low mood, anger, and other negative emotions. Just two instances of how PCOS can affect the timing of events and occurrences are pregnancy and the subsequent transition to parenting. For example, PCOS women who are overweight are at a greater risk of infertility, miscarriage, and other pregnancy complications (Sanchez, 2014). Due to menstrual and acne problems, women with PCOS tend to isolate themselves, "stay at home and hide," and are less likely to participate in extracurricular activities, especially as they become older.

The majority of doctors and PCOS patients agreed that hormonal imbalance and irregular periods were the two most prominent PCOS clinical symptoms, however many doctors and PCOS patients also recognised ovarian cysts as an important element (Gibson-Helm, Teede, Norman, & Boyle, 2014). It has been observed in Pakistan that women who are experiencing symptoms of polycystic ovary syndrome (PCOS) do not visit gynaecologists until the condition has progressed to a potentially fatal stage. In addition, a 2014 study in Quetta, Pakistan (Haq, Nasim, Riaz, & Tahir, 2017) found a similar lack of understanding among young women.

2.1.4. Experts Discuss PCOS Genetics

• The field of medicine

Jennifer read in the news that 10% of women of childbearing age are susceptible to polycystic ovary syndrome (PCOS), which can lead to infertility and complications with other metabolic

diseases including type 2 diabetes, but the underlying causes are still unknown. It is also highly heritable, with an increased risk for identical twins and a 20% chance for siblings of a woman who has been diagnosed. A study published in "Nature Medicine" provides evidence that the interaction between a hormone produced primarily by the ovaries and a network of neurons in the mother's brain can alter placental enzymes and cause PCOS-like symptoms in the offspring (Couzin-Frankel, 2018). The majority of infertility in women with polycystic ovary syndrome (PCOS) is attributable to the presence of more than 12 cysts within the ovaries, each measuring 8 millimetres in diameter (Khan, Shaikh, & Ajmal, 2019). This syndrome has a complex aetiology related to both the environment and genetics. The risk of polycystic ovary syndrome (PCOS) increases with poor diet, lifestyle, or infection (Khan, Shaikh, & Ajmal, 2019).

PCOS and the Androgen Receptor

Recently, the importance of androgens in controlling female fertility has come to light. Transgenic AR knockout mouse models have indicated that AR-mediated androgen actions contribute to the maintenance of female reproductive function and ovarian activity (Paris & Bertoldo, 2019). The androgen receptor (AR) facilitates androgen effects. Extensive evidence from human and animal studies suggests that elevated androgen levels, via the androgen receptor (AR), contribute significantly to the development of polycystic ovary syndrome (PCOS) (Paris & Bertoldo, 2019). Serum concentrations of several androgens, including testosterone (T), androstenedione (A4), and dehydroepiandrosterone sulphate (DHEAS), as well as 3-hydroxysteroid dehydrogenase (3-HSD), an enzyme necessary to convert pro-androgens to bioactive androgens, are elevated in women with hyper-androgenic PCOS (Keefe & Goldman, 2014). Excess androgen production has been linked to insulin insufficiency and hyperinsulinemia, which in turn reduces levels of globulin-containing reproductive hormones and increases levels of free androgens and poor metabolic profiles (Paris & Bertoldo, 2019). Animal studies have shown that the same endocrine, sexual, and metabolic symptoms seen in women with polycystic ovary syndrome (PCOS) can be seen in rodents, sheep, and primates when they are exposed to high levels of androgens during pregnancy (Handelsman, Walters, & Allan, 2012). All androgenized prenatal models of polycystic ovary syndrome, including those in rats, sheep, and non-human primates, show hyperandrogenism, LH hypersecretion, and the development of the classic PCOS morphology of multiple arrested antral follicles and ovulatory instability (Handelsman, Walters, & Allan, 2012). Several metabolic aspects of PCOS, including obesity and altered adipose function, have been observed in animal models of PCOS produced by androgens. Impaired preadipocyte development is seen in the rhesus

monkey PCOS model, and increased fat mass, larger adipocyte cells, and decreased adiponectin levels are signs of adipose dysfunction in female androgenized mice (Paris & Bertoldo, 2019). Additionally, in mouse, sheep, and primate PCOS animal investigations, insulin insufficiency and hyperglycemia have evolved as a result of elevated androgen's, again resembling medical PCOS symptoms (Handelsman, Walters, & Allan, 2012).

Receptor for Follicle-Stimulating Hormone (FSHR)

The FSHR gene spans p21-p16 on chromosome 2 and consists of 10 exons and 9 introns. The extracellular domain of a receptor is coded for by the first nine exons, while the C-terminal end of an extracellular domain, a full transmembrane domain, and the intracellular domain of the FSHR are encoded by exon 10 (Laven, 2019). The endocrine reproductive system reacts negatively to fluctuations in hormone levels. The severity of PCOS is attributable to a number of factors, including the quantity of FSH in addition to other hormone imbalances. Follicular and ovarian function are both negatively impacted by FSHR abnormalities (Khan, Shaikh, & Ajmal, 2019).

The subjects of a study conducted in Korea included 235 women with PCOS and 128 healthy controls from Seoul. Ser680Asn and Ala307Thr are two FSHR polymorphisms that were studied (Gu, Park, & Baek, 2010) to identify their genotype frequencies. They found that the FSHR Ser680Asn variant was much more often linked to polycystic ovary syndrome. The Ala307Thr mutation, on the other hand, was not strongly associated with PCOS. Neither the Ser680Asn nor the Ala307Thr polymorphisms were found to be associated with PCOS risk in their haplotype analysis (Gu, Park, & Baek, 2010). In a sample of 522 Japanese women, the respective percentages of Asn/Asn, Asn/Ser, and Ser/Ser were 41.0%, 46.9%, and 12.1%. The Asn/Ser population in poly-cystic ovary patients was much bigger than in the spontaneously ovulating group (Sudo et al., 2002). A total of 96 PCOS women from the Punjab region of Pakistan and 96 healthy women from the same location served as controls in a recent study conducted in Pakistan. Gene polymorphisms in the FSHR, LHHCG-Receptor, LH-chain, and both ER- and ER-receptor genes were reported to be associated with PCOS susceptibility in Pakistani women (Liaqat, Jahan, Krikun, & Taylor, 2015).

That'd be LH, or luteinizing hormone.

According to Medline Plus's definition of luteinizing hormones, LH is made in the pituitary, a tiny gland located near the base of the brain. The hormone LH is essential for sexual maturation and performance. LH helps keep women's menstrual cycles regular. In addition, it triggers the

ovary to release the egg. Ovulation describes this process. In the hours leading up to ovulation, LH levels spike sharply. The production of testosterone, which is required for sperm formation, is triggered in males by LH. Male LH levels tend to be stable. In children, LH levels are normally low until just before puberty, at which point they begin to rise. LH causes the ovaries in females to release oestrogen. This hormone is important because it signals the testicles to make testosterone (Nationa; library of medicine, 2007). The normal range for LH and FSH is 5-20 mlU/ml. However, before ovulation, there is a 24-hour a day, seven-day a week surge in LH to almost 25-40 mlU/ml (Sterling, 2011). After the ovary releases the egg, LH levels normalise. While many PCOS women's LH and FSH levels fall between the 5-20 mlU/ml range, the LH is often two to three times higher than the FSH. For instance, Luteinizing hormone levels in women with PCOS are normally about 18 mlU/ml (Sterling, 2011) and FSH levels in women with PCOS are typically around 6 mlU/ml (both values are within the normal range of 5-20 mlU/ml). A high ratio of LH to FSH, also called a 3:1 ratio, defines this condition. This change in the LH to FSH ratio alone can prevent ovulation from occurring (Sterling, 2011). LH is created sexually in the body naturally. The frequency and strength of LH pulses increase in women with PCOS (King, 2006), leading to higher levels of LH production throughout the day. This is believed to be due to the higher frequency of pulses of hypothalamic gonadotropin-releasing hormone. The ovarian cells respond to an increase in LH by making more androgen (King, 2006).

Five-fifty women with polycystic ovary syndrome (PCOS) and fifty-five controls of same age were studied in a case-controlled research undertaken in Jordanian women (M.M., F., & M.F., 2022). The prevalence of hirsutism, acne, infertility, and body mass index all vary significantly between the two populations. Oligomenorrhea, hirsutism, acne, decreased fertility, an elevated LH level, an elevated LH/FSH ratio, and a higher than average body mass index were all observed to be more prevalent in PCOS patients compared to controls. Women with PCOS reported having irregular periods, the study found. The prevalence of oligomenorrhea ranged from 66.7% to 73.8%. LH increases androgen production in the ovaries while a lack of follicle stimulating hormone (FSH) has the opposite effect. Proliferation of ovarian theca cells, brought on by an LH/FSH imbalance, contributes to PCOS women's increased steroidogenesis and hyperandrogenism. This study found that 33% of PCOS women had an LH/FSH ratio of 1.5, whereas 51% of PCOS women had an LH level of 10 (M.M., F., & M.F., 2022).

Hormone estradiol

Oestrogen, a hormone unique to females, is made largely by the ovaries with some assistance from the adrenal glands. The most powerful form of oestrogen is called estradiol. In addition to progesterone, adequate oestrogen levels are required for menstruation to occur. It comes as a big surprise to the vast majority of PCOS patients when their oestrogen levels are found to be within the normal range (25-75 pg./mL). This may be due to the fact that insulin and testosterone are both elevated in PCOS individuals, and both of these hormones have the potential to be turned into oestrogen in some situations (Sterling, 2011). Patients with polycystic ovary syndrome (PCOS) often have elevated Oestrogen levels, which can lead to acne and hirsutism. In addition to polycystic ovary syndrome, other hormonal abnormalities, such as high testosterone, may contribute to ovulatory infertility. One example of this kind of imbalance is oestrogen dominance. High levels of oestrogen and insufficient progesterone are the result of ovulation failure, as stated by Galan (2023). It's also possible that environmental factors play a role. Chemicals in the environment, known as xenoestrogens, can act as endocrine disruptors by mimicking the effects of the hormone oestrogen. Substances (often discovered in skin and hair care) are examples of endocrine disruptors (Galan, 2023) as are pesticides, Bisphenol A (BPA), and phthalates (found in plastic tubs, bottles of water, and paper receipts). It is believed that BPA interferes with oestrogen receptors, which causes a disruption in the signalling pathways. Studies have shown that BPA levels are higher in women with PCOS (Galan, 2023) than in women without the disorder.

Previous studies of ER have revealed that the ER and the ER have distinct cellular localizations in human endometrium. At the secretory stage of menstruation, ER (ER and ER) expressions are lower than they were at the beginning of the menstrual cycle (Xu, Deng, Lian, & Yu, 2021). Since the endometrium is an oestrogen target tissue, hyperplasia and cancer are risks for women who do not ovulate regularly. There is a strong correlation between PCOS symptoms and the development of endometrial cancer. Women under the age of 50 who have PCOS are four times as likely to develop endometrial cancer than women without PCOS. atypical estrogenic environments (Xu, Deng, Lian, & Yu, 2021) alter the responsiveness of the endometrium, increasing the risk of atypical abortions or the failure to implant a blastocyst. Polymorphisms in known ER- were also associated with endometrial cancer development (Xu, Deng, Lian, & Yu, 2021).

Tissue Progesterone

Progesterone is produced by the corpus luteum after ovulation. Preparation of the uterine wall for pregnancy is aided by progesterone. If a woman with PCOS is trying to conceive and taking fertility drugs, she should have her progesterone levels evaluated 7 days after her expected date of ovulation. Ovulation has happened and the egg has been discharged from the ovary if progesterone levels are high (often over 14 ng/ml). The egg may not have been released if progesterone levels are low. Women with PCOS may exhibit ovulatory symptoms, but if a progesterone test is performed, it will show that fertilisation did not occur (Sterling, 2011).

Receptor for insulin

Mutations in the insulin receptor (INSR) can cause severe hyperinsulinemia or insulin resistance due to the receptor's central function in insulin metabolism. Insulin resistance is conserved in invertebrates, worms, mammals, and birds, including humans, suggesting that it provides a survival advantage (Katic & Kahn, 2005). This suggests that one of the developmental inherited susceptibility loci for PCOS is associated with insulin resistance. The primary key to long-term continued existence in starving people is insulin resistance, which reduces protein losses during times of starvation by decreasing the need to use essential amino acid carbohydrate to make glucose (Sezgin, Unl € ut € urk, & Yildiz,, 2016). Recent research suggests that insulin resistance helps the body prepare for migration/hibernation by making glucose readily available for inflammatory processes in response to starvation, disease, and trauma. Insulin resistance also aids in promoting growth during pregnancy, puberty, and cancer. Some evolutionary defence mechanisms, such as insulin resistance, may have backfired when the human diet became less of a priority and a more sedentary lifestyle was adopted. Despite protecting the body against starvation and social stress, insulin shortage promotes the development of metabolic illnesses like PCOS in situations where food is abundant (Sezgin, Unl € ut € urk, & Yildiz, 2016).

2.2. PCOS: How My Family and Neighbours See It

2.2.1. The View from Home

Studying the effects of family stress on (insulin receptor) polycystic ovarian syndrome was done among the Madurese people of Indonesia. Treatment for mental health issues was more common among women who diagnosed with PCOS, and they also reported higher rates of anxiety, depression, stress, and other mental health issues (Suhron & Zainiyah, 2021). The results show that families with low levels of social support, low levels of self-esteem, or depression feel a disproportionate amount of stress in response to PCOS. This study found no

statistically significant change in insulin receptor gene expression between women with PCOS and healthy women. The INSR gene is most commonly found to be heterozygous rather than homozygous in the Madurese Tribe. Different findings are expected from studies of the INSR gene in various racial and ethnic groups (Suhron & Zainiyah, 2021).

The value of parenting for Indian women has been highlighted through anthropological studies of gender and reproduction. Women are regularly evaluated for symptoms of pregnancy and fertility throughout their reproductive years (Inhorn & Bharadwaj, 2007). Companionable marriages with'supportive' spouses seem to be the norm for the Pathaks, according to their own accounts. All the women I talked to who are married told their spouses their concerns regarding Polycystic ovary syndrome and having children, regardless of whether their unions were romantic or planned. Even when staying with in-laws, husbands typically accompanied their wives to medical appointments. Spouses played a vital role in easing their worries and stress. In contrast, women of previous generations typically received little or no support. Unmarried women's stories showed that they all had the same companionship marriage goals. As Pathak ('They think of a family only in their thirties': gendered subfertility and emergent intimate moderranities in India, 2019) notes, "interviewees who are single stated moreover men who have been incapable or unwilling, did not make the right partners to engage in trust and honesty or reside with their PCOS." It has been hypothesised (Vytiska-Binstorfer, Schmid, Kirchengast, & Huber, 2004) that Pakistani Muslims who have immigrated to Australia may experience PCOS and feel unfulfilled if they do not have children. Muslim immigrant women place a far higher value on having children than do women in Austria. Motherhood is essential for the female sex business, Muslim women say, and infertility is a source of shame. Their views on the topic of infertility being kept secret from the public also differ significantly from those of European women (Vytiska-Binstorfer, Schmid, Kirchengast, & Huber, 2004). Women of Islamic background tend to feel that infertility should be concealed, in contrast to the views of Austrian women who do not think it is necessary to make a big issue about it. Due to the religious importance placed on having children, infertility is generally frowned upon in Muslim communities (Vytiska-Binstorfer, Schmid, Kirchengast, & Huber, 2004).

2.2.2. Local stigma and public opinion

disease comprises a biological and an experiential component, which are distinct from one another, and certain situations have social or cultural implications; these are the two premises identified by the connotations of disease. Mood disorders, HIV/AIDS, and other illnesses that

carry a stigma in Western societies. Some illnesses are universally acknowledged as real (like diabetes), whereas others (like fibromyalgia) are debated. Disabilities include things like paralysis and impaired cognition, while things like substance misuse and excessive body fat are not (Conrad & Barker, 2010). Such distinctions are socially constructed and may have a nuanced meaning depending on the society in question. The results show that PCOS women feel stigmatised due to societal and cultural expectations about what it means to be a woman. Enhanced by socialisation and the media, the Western cultural demand depicts an ideal for women's roles and prescribes gendered beliefs and behaviours associated with parenting and cultivation (Wright, Dawson, & Corbett, 2020). In addition, it was observed that women with PCOS and hirsutism avoided social engagement, and that this prevented them from engaging in health-seeking behaviour, self-management, and treatment adherence. Stigma-related stress may be another contributor to these women's feelings of helplessness (Wright, Dawson, & Corbett, 2020).

Stigmas, as defined by Goffman (1963), are "any stain and mark that distinguishes one person from another; it conveys the knowledge that those persons have a flaw of body or character that detracts from their look or identity." The practise of branding criminals and slaves in ancient Greece to denote status is where the word "brand" originates from. People avoided criminals and slaves because they were ashamed to be seen with them because of their brands (Goffman, 1963). Goffman (1963) classified stigmas into three categories: "abominations of the body" (such as burns, scars, and deformities), "blemishes of individual character" (such as crime and addiction), and "tribal" identities or social identifiers associated with marginalised groups. Social psychologists have conducted empirical research on stigmatised situations to determine which aspects of these situations are most offensive to the general public (Johnston-Robledo & Chrisler, 2013).

The stress of change was a common subject in the interviews conducted by Nichter and Pathak to assess the amount of stress. A man above the age of 36 who claims to be well-informed on the state of Indian society described it as "in transition." You want to live by the book, socially speaking, yet cultural factors still have an effect on women. Polycystic ovarian syndrome in globalising India: an ecosocial perspective on an emergent lifestyle disease (Pathak & Nichter, 2015). This is despite the fact that many more women in urban areas have paid jobs than those in rural areas. According to the findings of (Rajkumar, et al., 2022), many people, especially in Indian culture, hold negative stereotypes and misconceptions regarding this topic. Unfortunately, few people ever bring up PCOS in casual conversation. Some people believe

that telling their potential spouses that they have PCOS is superstitious. Misunderstanding of the syndrome seems to be at the root of such views. The importance of female reproduction is likely to have been a major factor. Important family members are more prone to keep secrets of this nature because, according to Indian cultural norms, they are worried about the implications for the continuation of the family's bloodline. However, many PCOS patients expressed concern about their care due to the cultural expectation that women will bear children in the future (Rajkumar et al., 2022).

In the cultural setting (Sharmaa & Mishra, 2018), PCOS is considered a "tabooed disease" since it is thought to be the outcome of black magic and to bring shame upon the family. The cultural element described by (Sharmaa & Mishra, 2018) that in-laws parents interpret a woman's (a possible future daughter-in-law's) condition as simply incapable of having a child is best exemplified by the concerns about fertility among unmarried women's parents and close relatives. New studies show that single women's parents worry about their daughters missing out on potential marriage mates because of their daughters' infertility (Rajkumar et al., 2022). According to Ayurveda, the menstrual cycle is the only means for the body to purge itself of doshas (impurities) at a specific period of the month. Therefore, it is simply a blessing for women to be able to do a monthly cleanse. The female body, however, gradually loses strength and vitality as time progresses. Therefore, restricting women is a good strategy to help them recover from the energy drain that occurs during this time. However, this natural function has been stereotyped and women who have recently experienced it have been stigmatised due to the social construction of the female body and the reinforcement of male supremacy beliefs in society (Sharmaa & Mishra, 2018).

Women's reproductive health, sexual orientation, mental health, and social standing are all negatively affected by the stigma surrounding menstruation. Consciousness and avoidance stemming from worries about disclosing menstruation status are frequently cited as consequences (Johnston-Robledo & Chrisler, 2013). Because of its association with infertility and hormone imbalance, PCOS is often stigmatised (Chopra, Shanmugam, Choe, & Zehrung, 2021). Fear of "disappointing" one's spouse and family by being unable to conceive "naturally" was a key source of PCOS stigma, according to research by Chopra, Shanmugam, Choe, and Zehrung (2020), despite the fact that PCOS is actually quite common. Having no children is a social stigma in India's middle-urban and rural communities due to discriminatory legislation. If they don't have children, everyone in society will call them "baanj" (barren). Families, friends, and neighbours all play a role in shaping the social meaning of a woman's infertility.

She is bullied by her in-laws and the community if she is unable to meet the societal expectations placed on women by the needs of the kid (Sharmaa & Mishra, 2018). Sharma found that most women with PCOS did not feel comfortable disclosing the condition to their in-laws, and that their explanations were often met with unfavourable reactions from their spouse's family. The statement, "My in-laws continue to treat me like a household maid," was made by one responder. "She says I'm useless because I can't give them a child in the family; now I can at least enable with the family's domestic duties" (Sharmaa & Mishra, 2018) found that the narrative pattern of every married woman with Polycystic ovarian syndrome included the horrors of infertility and the inability to have children. Having PCOS is a major challenge, and it's even more challenging for married women who are unable to have children. Therefore, infertility is the primary source of shame for those with this illness (Sharmaa & Mishra, 2018).

2.2.3. PCOS's societal effects

As individuals actively participate in the development of their own social lives, including the construction of individual identity, as per Goffman and some other symbolic interactionists, the concept of illness is socially constructed (Conrad & Barker, 2010), having different shapes by the culture and society. Whether it's through their social networks, careers, health plans, religious or cultural beliefs, or anything else, people search for meaning in their illnesses. Identity reconstruction is a form of social interaction that helps people fight back against identity erosion (Conrad & Barker, 2010). As Bury (1982) puts it, when disease is a "biographical disruption," people reimagine themselves in light of unexpected turns in the story. Having a chronic illness (such uterine cancer, for example) might force a person to reevaluate their previous life and sense of self, as well as create a new sick identity. To sum up, medical sociologists have shown that laypeople occasionally initiate and coordinate illness-based social movements, generate lay knowledge about their own medical difficulties, and establish new societies centred on illness personas (Conrad & Barker, 2010). An individual's experience can be shaped by the meaning and feedback given to their situation, which is why a constructionist perspective might be helpful (Conrad & Barker, 2010).

According to research (Amiri, Thamtan, Tehrani, Simbar, & Montazeri, 2014), one of the most common issues among PCOS patients is a lack of social connection as a result of societally created standards and improper responses from the society. A representative married lady said, "From a physical standpoint, I think I'm extremely healthier; however, I think I am not social in any kind." "Recently, I want to be alone," said a 26-year-old single woman. "I prefer to

remain alone due to my drastic hair loss. I became depressed because I saw my colleagues with bushy hair, which I do not have. When I make a comparison myself to them, I get depressed and chose to stay at home" (Amiri, Thamtan, Tehrani, Simbar, & Montazeri, 2014).

One study comparing Muslim immigrants' infertility rates with those of Australian natives found that cultural factors, such as PCOS, had a detrimental effect on the quality of life for both groups (Vytiska-Binstorfer, Schmid, Kirchengast, & Huber, 2004). There is significant social pressure to start a family quickly after getting married in the Islamic world. Muslims see procreation as a religious obligation and view children as a favour from Allah. Since having children is a religious obligation in Islam, infertility is a major taboo. They found that many Islamic Pakistani women believe that their birthing pattern affects how people perceive them, and that when they have children, they are more highly respected in the family (Vytiska-Binstorfer, Schmid, Kirchengast, & Huber, 2004). A childless woman's appearance is not required (Vytiska-Binstorfer, Schmid, Kirchengast, & Huber, 2004). Another study comparing PCOS in Brazilian and Austrian women found that the latter group suffered more severely from the condition's negative effects on quality of life. Brazilian women, for example, place a lower value on factors related to life satisfaction than do Austrian women (Hashimoto et al., 2003). The quality of life of Brazilian women is considerably impacted by hirsutism, infertility, and monthly irregularities compared to that of Austrian women (Hashimoto, et al., 2003).

Women may experience emotional distress due to the social stigma associated with PCOS. Sexual dissatisfaction, weight gain, and difficulties with body image and having a traditionally feminine attitude are typical among those who are considered "PCOS victims," causing significant emotional distress (Sulaiman et al., 2017). It has also been noted that the occurrence of skin issues and hirsutism in teenagers with PCOS can lead to a distorted body image that can be emotionally taxing. Because of the stigma attached to infertility, treatment for PCOS can be difficult for women living in societies like Oman, where women's worth is tied to their ability to have children. those with PCOS were reported to have a higher prevalence of moderate and severe depression compared to those without PCOS. Women with PCOS were also more likely to report moderate levels of anxiety and sadness than women without PCOS (Sulaiman et al., 2017).

Many women with PCOS report low self-esteem and feelings of loneliness due to the interference of fertility disorders with a central part of their female identity, according to research by Wright, Dawson, and Corbett (2020). "I feel so depressed & I dislike the thought

that I might not be able to conceive and feel that life grow within me," remarked one study participant. Lack of social support, whether genuine or perceived, has been connected to depression and loneliness (Wright, Dawson, & Corbett, 2020). "I'm not much of a woman." Due to the social stigma of PCOS, it is important to provide women with support as they work to build self-confidence and coping mechanisms (Wright, Dawson, & Corbett, 2020). People with PCOS verified social limits and humiliation, and said that the condition had a significant impact on their everyday lives (Chopra, Shanmugam, Choe, & Zehrung, 2021). In addition, PCOS symptoms such as obesity, acne, hair loss, and hirsutism have a profound effect on one's physical appearance and may cause those with PCOS to feel "apart from what is considered to be normal" (Chopra, Shanmugam, Choe, & Zehrung, 2021). These, in turn, had a major impact on their self-esteem, self-image, and social-image, and persons with PCOS tried to get social support in a variety of ways, whether from family and friends, friends, or those with the same condition (Chopra, Shanmugam, Choe, & Zehrung, 2021).

2.2.4. Concepts of one's own body

The phrase "body image" refers to a person's mental and emotional outlook on their physical selves, including their health, body type, and abilities, as well as their sexuality-related thoughts and feelings (Aba & ik, 2022). In many cultures, youth and physical attractiveness are regarded as the two most important aspects of a person. Many factors, including the individual's age, gender, personality structure, the value attributed to the changing bodily part, and even whether or not the change is evident, can affect how someone reacts to a physical alteration. Consequently, it stands to reason that the mental and bodily shifts experienced by women with PCOS may affect their sense of self-esteem (Aba & ik, 2022). Modifications in body image in women with polycystic ovary syndrome are said to have a negative effect on self-esteem, especially when compared to the self-images of healthy women (Aba & ik, 2022).

Depression and body image among women with polycystic ovary syndrome (PCOS) have been the subject of numerous studies (Himelein & Thahcher, Depression and Body Image among Women with Polycystic Ovary Syndrome, 2006). Thin-type PCOS women are more likely to be overweight than other women (Sioma-Markowska & Milena, 2021). This ranges from 30% to 60% of women overall, depending on race and ethnicity. Androgen levels, insulin resistance, dyslipidaemia, infertility, and monthly abnormalities are all increased by having too much adipose tissue (Sioma-Markowska & Milena, 2021). Fasting blood sugar levels are also increased. Scientific studies show that dropping 5-10% of one's body weight improves

metabolic, mental, and reproductive health (Sioma-Markowska & Milena, 2021). Eighty-seven percent of PCOS women do not have children, 22% of PCOS women are obese, 28.5% of PCOS women have a body mass index, and 17% of PCOS women have had the condition for more than nine years (Sioma-Markowska & Milena, 2021). The majority of women (63% and 54%, respectively) agreed that "a slim figure is preferable in our culture" and that "men prefer slim women more." Women who did not conform to this ideal refused to accept themselves. They have a poor perception of their bodies because they refuse to accept their actual weight (Sioma-Markowska & Milena, 2021).

Cultural anthropology provides a rich and diverse ethnographic record of how various people value and make sense of specific appearances and appearance-related activities (Anderson-Fye, 2012), which the anthropological perspective on physical appearance and body image argues elaborates. As a result, cultural anthropologists are interested in the why, how, and what representations of thinness exist in different parts of the world (Anderson-Fye, 2012). It's possible that a slender physique is deemed "beautiful" in many Western countries, "useful" in isolated Fiji, and "sick" in metropolitan Southern Africa. Anthropologists with a cultural focus agree that local meanings are essential for making sense of visual impact and body image, especially in the presence of pathology (Anderson-Fye, 2012). Anthropologists have a lot to offer when it comes to explaining and understanding women's health concerns from the perspective of women themselves, which is something that has been lacking in the research agenda for women's reproductive health, which has instead been predominantly determined by the Western biomedical paradigm and public health. Using the in-depth qualitative cultural tradition of ethnography, anthropologists have accumulated a growing corpus of rich and contentious literature demonstrating the prevalence of women's health problems across the globe (Inhorn, 2008).

According to Greenhalgh, the "war on fat" is a biopolitics scientific campaign to control the "obesity epidemic" by remaking fat people into thin, healthy examples of the American ideal. Studying people in Southern California (Greenhalgh, Weighty subjects: The biopolitics of the U.S. war on fat, 2012), researchers look into how the advertisement affected their bodies, identities, and daily routines. He argues that the war on fat is actually creating a new fat problem, at least in this part of the country, by increasing the number of weight load, identity "abnormal" "fat subjects," who may not be obese but whose helpless efforts to lose mass endanger one's health and cause intense socioemotional suffering (Greenhalgh, Weighty subjects: The biopolitics of the U.S. war on fat, 2012). Greenhalgh, "Disordered Eating/Eating

Disorders: Hidden Perils of the Nation's Fight against Fat," 2015, adds more evidence that the project war on fat is failing to achieve its purpose, especially among young women. Their experiences are shared by many others, according to recent quantitative research: "it is demonstrated that women with Polycystic ovary syndrome have more than 4 times the chance of revealing disordered eating behaviours than controls in the largest cross-sectional investigation to date to analyse the prevalence of eating disorder symptoms in women with PCOS" (Vleming, 2018).

Contradictory recommendations for women with PCOS to lose weight and recommendations for women with eating disorder symptoms to attend therapy, which may not usually focus on extreme weight loss, offer an interesting conundrum, according to Lee and colleagues. Studies have indicated that PCOS symptoms like hyperglycemia, hyperandrogenism, and ovulatory dysfunction are exacerbated by excess body weight, and that these symptoms can be alleviated with healthy weight loss (Lee, et al., 2017). However, when counselling a woman with PCOS who also has an eating disorder, it may be necessary to employ non-traditional methods of weight control (Lee et al., 2017). Dissatisfaction with looks, fear of losing one's femininity, a sense of diminished sexual attractiveness, and self-consciousness about one's physical self are all common complaints among PCOS patients (Bazarganipour et al., 2013). Women with PCOS may experience emotional anguish and have their sense of femininity challenged as a result of the condition. ConclusionsBody mass index was found to be negatively associated with body satisfaction. It has been shown that the android fat sequence is seen unattractively in many cultures (Bazarganipour, et al., 2013), which may contribute to the negative body image experienced by PCOS women. Obesity is associated with a lower quality of life and psychological morbidity (Bazarganipour, et al., 2013), and previous research has shown that being overweight or obese increases the risk of a number of other health complications.

The effects of Western ideology and lifestyles on body image problems like dissatisfaction with one's physical appearance, fear of gaining weight, a reliance on diets, and an internalisation of images from the media could be better understood if they were compared across cultures. For instance, Gupta, Chaturvedi, Chandarana, & Johnson (2001) compared the weight survey of psychological sub-scale: body dissatisfaction (BD) of eating disorder inventory, and drive for thinness (DT) in a sample of 65 Canadian and 47 Indian women aged 18 to 24 concerned about their body image. Gupta, Chaturvedi, Chandarana, & Johnson (2001) also categorised various body sections as overweight, including the abdomen, hips, and lower body. Similar responses were found for the DT, BD, and body area discontentment when the

effects of the groups' different BMIs were taken into account (Gupta, Chaturvedi, Chandarana, & Johnson, 2001).The Indian group, however, had a less disturbed perception of their body mass than the Canadian and was more concerned with the upper torso (chin, neck, biceps, and chest). These results show that both populations have similar general frustrations with their body images, but that sociocultural differences may underlie specific disruptions (Manlove, 2011).

Researchers in Pakistan compared the perspectives of women with and without polycystic ovary syndrome (PCOS) about their bodies and their levels of sadness. The results of this study suggest that PCOS patients place a high value on how they look (Kanwal et al., 2021). New studies show a striking correlation between study group and body image perception; 98.3% of control individuals had a good body image, indicating a healthy mental state, while only 65% of patient populations in the PCOS group did (Kanwal et al., 2021). In addition, more than half of PCOS women (55%) had felt depressed because of how they viewed their bodies. A substantial correlation between depression and the research group has been shown, however (Kanwal et al., 2021).

2.3. Methods for treating and controlling PCOS

2.3.1. Clinical Medicine

PCOS patients typically have hormonal difficulties, high blood cholesterol levels, and weight gain, as reported by (Akre, Sharma, Wanjari, & Chakole, 2022). They must realise that physical activity alone will never result in significant weight loss. Keeping to a healthy diet is crucial. Indian ladies rarely worry about their diet. One gramme of fibre per kilogramme of body weight is recommended as part of a healthy diet (Akre, Sharma, Wanjari, & Chakole, 2022). Several studies have shown that people who are overweight can benefit from losing weight, and women with polycystic ovary syndrome (PCOS) who were having trouble conceiving were able to ovulate abnormally and respond well to ovulation stimulation medicines, leading to higher pregnancy and live birth rates. Studies have shown that decreasing as little as 5% of one's initial weight can increase ovulation and fertility drug response and restore normal menstruation (Akre, Sharma, Wanjari, & Chakole, 2022). The American College of Nurse-Midwives estimated that between 5 and 30 percent of women, or about 6.8 million Americans, have PCOS based on the results of a separate examination of the condition. The cost of caring for women diagnosed with PCOS between the ages of 14 and 44 in the United States in 2006 was more than US$430 million (Kanjikar, Londonkar, & Hugar, 2018). Insulin resistance was decreased

in a group of 15 women with polycystic ovary syndrome (PCOS) by enhancing phosphatidylinositol-3-kinase function in the signalling pathway.

Recent Turkish research (Kanjikar, Londonkar, & Hugar, 2018) suggests that spearmint tea has anti - androgenic properties in women with Hirsutism. It is important to think about potential side effects when choosing a synthetic medication, such as weight gain, weariness, nausea, oedema, diarrhoea, sinusitis, hypoglycemia, and kidney difficulties. In order to overcome infertility caused by polycystic ovary syndrome (PCOS), a novel medicine developed from multiple plant sources is needed (Kanjikar, Londonkar, & Hugar, 2018). According to biomedical studies (Witchel, Oberfield, & Pea, 2019), medicine is just as significant as changes in lifestyle for the management of PCOS, and includes things like:

Glucophage and Metformin

When it comes to PCOS, the insulin inducer metformin has received the most attention. Adolescents between the ages of 15 and 19 use it often despite the fact that it is "off label" for this indication (Wang, McNeill, Chen, Shankar, & Senderak, 2016). Further, "the consumption of metformin in relation to lifestyle could be considered in some cases, "Teenagers with a clear specific diagnosis or with PCOS symptoms prior to diagnosis" (Witchel, Oberfield, & Pea, 2019), which is the most recent international evidence-based guidance for PCOS assessment and management. A meta-analysis comparing the effects of metformin and oral contraceptive pills in adolescent girls with polycystic ovary syndrome found that metformin at an intake of (1700-2000 mg/d) was associated with a greater improvement in body mass index, while COCPs were associated with improvement in irregular menstrual cycles and acne (RA, Florez, Dennis, Thabane, & Bassilious, 2016).

Estimates were based on low-quality evidence from small studies (RA, Florez, Dennis, Thabane, & Bassilious, 2016), showing that both metformin and contraceptive tablets had positive effects on hirsutism, triglyceride levels, and high LDL cholesterol. Metformin, an oral drug, is a rDNA methylation inhibitor that has been shown to be effective in treating PCOS in high-metabolic risk subgroups, including certain ethnicities and people at high risk for diabetes (Witchel, Oberfield, & Pea, 2019).Metformin can also be used in conjunction with COCPs, especially in adolescents with PCOS and a BMI of $25 kg/m2, as well as in PCOS patients with a BMI of 25 kg/m To treat diabetes, metformin is taken orally (Advanced Fertility Centre of Chicago, n.d.).

COCP stands for combined oral contraceptive pills.

COCPs (Oestrogen levels and progestin preparations) should be seriously considered for the management of irregular menstrual cycles and/or clinical hyperandrogenism in teens with a clear diagnosis and in teens at risk of PCOS prior to confirmation of the diagnosis, according to recent international evidence-based guidelines (Teede, et al., 2018). When medical treatment for hirsutism or acne is necessary, COCPs should be made available as well (RA, Florez, Dennis, Thabane, & Bassilious, 2016). Due to not consistently taking medicine or being on COCPs, this can be supplied if the desire for shorter menstrual cycles and/or cultural preference arises (Witchel, Oberfield, & Pea, 2019).

Acne Treatment

A medical evaluation by Debra found that oral contraceptives can help with PCOS-related acne (Sullivan, 2020). Lowered testosterone levels are a side effect of these medications because of the combination of oestrogen and progesterone. Reducing testosterone helps stop acne and hirsutism. Not all contraceptive tablets are created equal when it comes to treating acne caused by polycystic ovary syndrome (PCOS) (Sullivan, 2020). Progesterones like cyproterone acetate and drospirenone are effective at counteracting the effects of androgens. Researchers discovered that inflammatory acne decreased by 30–60% within three to six months of birth control pill medication. They predict that 50-90% of persons who use this method will experience an improvement in their acne. Acne and hirsutism brought on by PCOS may also be treated with the drugs spironolactone and flutamide (Sullivan, 2020). Acne has a strong negative affect on teenage psychological well-being (Witchel, Oberfield, & Pea, 2019), so quick consultation with a dermatologist should be considered when the recovery is poor or severe.

The Hirsutism Procedure

Professional light-based treatments include lasers (alexandrite, diodes, and neodymium-doped yttrium aluminium) and strong pulsed light. Eflornithine cream, at 13.9% concentration, is an irreversible blocker of ornithine decarboxylase and can relieve moderate face hirsutism in women with mild skin irritation (Witchel, Oberfield, & Pea, 2019). Melanin in the hair is harmed by the light emitted by these treatments, which has a wavelength of 600 to 1100 nm (Witchel, Oberfield, & Pea, 2019). This therapy, after a series of treatments, provides a permanent cure for hirsutism. Burns, dyspigmentation, and scarring may all be exacerbated by the fact that people with darker skin have more epidermal melanin, which can absorb light (Gan & Graber, 2013). It is possible to treat hirsutism and alopecia with antiandrogens alone if

COCPs are ineffective or not well tolerated. Administering antiandrogens in tandem with an effective contraceptive in sexually active adolescents has been shown to reduce the risk of foetal under virilization (Teede, et al., 2018).

An Example: Inositol

Inositol is a nutritional supplement that has been shown to improve insulin signalling. Its role in regulating the biochemical and metabolic aspects of polycystic ovary syndrome (PCOS) is little understood (Akre, Sharma, Wanjari, & Chakole, 2022). According to current research, both menstrual periods and ovulation can be enhanced. This recommendation is at odds with the fact that Inositol has few positive effects, is cheap, and has few negative ones as well (Akre, Sharma, Wanjari, & Chakole, 2022). Treatment with myo-inositol or D-chiro inositol can improve the symptoms of any chronic illness or aberrant test results. The ovary inositol mystery can be solved, according to the research (Kalra, Kalra, & Sharma, 2016), because both types of inositol can increase inositol levels in the vascular system and the ovary. By treating systemic insulin resistance, MI will help with the metabolic symptoms of PCOS. At the same time, normal DCI levels will create a harmonious environment inside the ovaries, which will help reduce hyperandrogenism, normalise menstrual cycles, and boost ovulation and pregnancy chances (Kalra, Kalra, & Sharma, 2016).

Secretion of insulin

Hyperinsulinemia and insulin resistance have long been associated to increased androgens in PCOS patients (Akre, Sharma, Wanjari, & Chakole, 2022), suggesting that aberrant insulin secretion and function may contribute to the development of PCOS. High amounts of insulin are detrimental to the ovaries because they disrupt the natural regulation of ovarian activity. Excess insulin causes muscle cells to secrete high quantities of androgens, which in turn inhibit ovulation and cause the poly-cystic ovarian form seen in PCOS (Akre, Sharma, Wanjari, & Chakole, 2022). Metformin is commonly used by doctors to treat insulin resistance and maintain a healthy androgen and male hormone balance. In addition to addressing IR-related concerns including dyslipidaemia, the insulin-sensitizing medication metformin has been recommended by current clinical recommendations (Trent & Gordon, 2020) because of its ability to improve glycaemic management and treat or prevent type II diabetes.

Infertility and ovarian dysfunction treatment

While infertility is a major concern for women with PCOS, current research shows that it is also a problem for adolescent girls with PCOS (Brady, Mousa, & Mousa, 2009). Pregnancy rates have been steadily increasing over the past two decades, as seen by national data from throughout the world. This is mostly because to the widespread adoption of assisted reproductive technologies (ARTs), which have greatly facilitated ovulation induction. Ovulation induction is becoming increasingly popular due in large part to the prevalence of anovulatory infertility, especially in women with polycystic ovary syndrome (PCOS) (Pasquali, 2018). In a recent large-scale, randomised, dual-center study, researchers compared the effectiveness of clomiphene citrate and the popular aromatase inhibitor letrozole in treating infertility. Despite no significant between-group variations in spontaneous abortion or more twin conceptions, letrozole significantly boosted total ovulation rates and drastically increased live births (Pasquali, 2018).

Medication for weight loss

Although its effectiveness has been questioned, orlistat is a weight-loss medicine that has been shown to work. Treatment with orlistat was associated with significant decreases in body mass and blood levels in a study evaluating the effects of orlistat and metformin therapy on hormonal and biochemical variables in women with PCOS. Compared to metformin, androgen levels are higher (Akre, Sharma, Wanjari, & Chakole, 2022). In a recent study, the effects of metformin and N-acetylcysteine on clinical, metabolic, and hormonal parameters in women with polycystic ovary syndrome were assessed. The effects of Glucophage (1500 mg/day) against N-acetylcysteine (1800 mg/day) on 100 women with PCOS were studied over a 24-week period by 41 researchers (Trent & Gordon, 2020). Body mass index, body composition, and waist-to-hip ratio all improved more in the N-acetylcysteine group, but weight reduction was similar between the two. Total testosterone was decreased after N-acetylcysteine treatment, and overnight insulin and the rising glucose-to-insulin ratio both showed significant improvement (Trent & Gordon, 2020). Anorexia and obesity can be treated with rimonabant, a CB1 receptor antagonist. In patients with PCOS who were overweight but did not have alcoholic fatty liver disease, rimonabant was found to decrease ALT levels and prevent weight gain (Akre, Sharma, Wanjari, & Chakole, 2022).

2.3.2. Strategies for Alternative Management

2.3.2.1. Management of lifestyle changes

Many obstacles stand in the way of PCOS women making positive changes to their daily routines. Self-management, behaviour modification approaches to remove obstacles, testing and referral as necessary for depression, poor body image, and eating problems, and addressing health literacy gaps are all necessary to support women in achieving their lifestyle goals (Ee, Pirotta, Mousa, Moran, & Lim, 2021). Polycystic ovarian syndrome (PCOS) is aided by regular exercise. It helps with weight loss and has been shown to reduce testosterone levels (Brennan, 2021). Nearly half of PCOS sufferers are overweight. Rapid weight loss can restore fertility and ovulation and improves insulin resistance, according to a recent study (Brennan, 2021). Self-management is defined as "a continuous process of self-directed behaviour change aimed at improving one's own emotional, behavioural, and medical management, with the aim of avoiding illness-related consequences, regulating symptoms, and reducing disease severity" (Ee, Pirotta, Mousa, Moran, and Lim, 2021). It has been shown that self-monitoring symptoms, creating personalised action plans in response to worsening symptoms, becoming aware of and implementing psychological coping methods to better manage stress, and increasing self-responsibility in daily lifestyle decisions and medication adherence are all effective self-management strategies for the general population (Dineen-Griffin, Garcia-Cardenas, Benrimoj, & Williams, 2019). Self-management strategies for PCOS have not been examined for their potential impact on PCOS patients' dietary and physical exercise habits (Ee, Pirotta, Mousa, Moran & Lim, 2021).

Mental health is another area in which exercise can benefit. Poly-cystic ovarian syndrome has been linked to an increased risk of mental health problems; as a result, engaging in mind-body practises such as Pilates, yoga, tai chi, and qi gong may be helpful (Brennan, 2021). Women with psychiatric comorbidities may benefit from a weight-neutral strategy in counselling for the reduction of body image distress, as is the case with binge-eating and disordered eating behaviours (Ee, Pirotta, Mousa, Moran & Lim, 2021). It's important for women to prioritise the physical activities they enjoy doing rather than the ones they feel forced to perform (like going to the gym). The use of mindfulness-based treatments is an innovative strategy that shows promise (Ruffault, Bernier, Juge, & Fournier, 2016) for enhancing individuals' intrinsic motivation to exercise and providing additional mental health benefits. Women with PCOS who engage in aerobic exercise see improvements in insulin sensitivity and ovarian shape without experiencing weight reduction (Redman, Elkind-Hirsch, & Ravussin, 2012). Researchers have found that PCOS patients' ovaries produce androgens due to inflammation. Tomatoes, kale, spinach, fatty acid-rich fish like salmon, sardines, and mackerel, nuts like

almonds and walnuts, fruits like cherries, blueberries, and strawberries, and extra-virgin olive oil have all been shown to have anti-inflammatory effects (Brennan, 2021). Evidence suggests that herbal treatment may aid in ovulation regulation and fertility promotion, according to a review of scientific studies on medicinal herbs and poly-cystic ovarian syndrome. Additional study is required to properly comprehend the effects of herbs on PCOS. There was a significant improvement in symptoms for the 122 women reviewed who took herbal medication in addition to undertaking lifestyle adjustments (Brennan, 2021).

An article in the Hindustan Times stated, "A high percentage of women are currently diagnosed with PCOS. It is a prevalent issue among women of reproductive age. As a result, it is critical for women with Polycystic ovary syndrome to adopt a good health and keep fit." It's common knowledge that sleep problems can make PCOS symptoms worse. As stated in "PCOS: Simple Lifestyle Changes to Help Manage the Condition," (2022), a good night's sleep can aid in the management of PCOS. Maintaining a clean and holistic way of life that puts one's emotional and physical well-being first is of the utmost importance (Dwivedi, 2021). In addition to adopting a plant-based diet, you should also schedule in at least 30 minutes of daily activity. Regular exercise, even whether it's only running, yoga, or something else, can help lower blood sugar levels. Regular meditation and breathing exercises like pranayama can help you deal with stress more effectively (Dwivedi, 2021). Seed cycling is another approach to treating PCOS. The practise of seed cycling, also known as a seed rotational diet, is regarded to be very helpful in managing irregular menstruation and Polycystic Ovary Syndrome (PCOS) in women (Savani, 2021). Seeds like pumpkin, flaxseed, chia, sunflower, and sesame seeds, which have been shown to help regulate hormone levels, should be consumed in doses of two tablespoons per day by women utilising the seeds cycling technique (Savani, 2021). Despite the absence of information, there is a pressing need to improve PCOS women's exposure to and understanding of potential risks. Ee et al. (2019) found that people are more likely to successfully adopt lifestyle change when they make decisions about it collectively and have a deeper understanding of risk characteristics (such as their own reactions to risk appetite, risk immediacy, perceived susceptibility, consequences, and control). In the past 15 years, the perspectives of several medical anthropologists on the impact of people's beliefs on their health-care practises have shifted dramatically (Pelto & Pelto, 1997). The rapid global spread of such "pluralistic health care practises" has contributed to these shifts. Many aspects of cosmopolitan medicine are now widely accepted in many countries where conventional care was predominant in the 1940s and 1950s, and this has occurred without any discernible decline

in traditional perspectives or therapeutic methods. Empirical evidence suggests that people are open to and even eager to use modern medications and other components of medical practises, although not prepared to completely renounce substantial parts of their traditional explanations of illness. Families throughout Asia, Africa, and South America use both traditional and modern medical care (Pelto & Pelto, 1997), sometimes one after the other and sometimes simultaneously.

2.4. Structure of Theory

The first person to represent the progression of a disease as a logical succession of stages was Suchman. from a patient's initial symptom assessment to their eventual use of a wide range of healthcare services (Kroeger, 1983). There is a wealth of observational and epidemiological data on the health-seeking habits of sick people around the world thanks to the fields of medical anthropology and socio-medical public healthcare research. While anthropologists studying health-seeking behaviour in developing countries have rarely used analytic frameworks developed in Western disciplines of social medicine to explain the sets of factors influencing people's choice of the various options for medical treatment provided to them (Kroeger, 1983), this is beginning to change. Durkheim's theory that cultural systems are pictures and markers of society itself (Hahn & Kleinman, 1983) suggests that this work's subject, the patient—his personality and body—bears the imprint of these developments in biomedicine and the body politic. Additional research into the manner in which social interactions and ideologies foster varying experiences of this kind of suffering is also recommended ("psychologization" here and there, "somatization" there, tension here and backpain there). In order to complement the current medical anthropological emphasis on Max weber's worries about order and purpose in sickness (Hahn & Kleinman, 1983), we must understand people and one's body more deeply as sociocultural objects in this investigation.

Anthropologist Emily Martin claims in her book The Woman in the Body that society's revulsion at a woman's body that hasn't given birth to a child comes from the fact that it represents a "lack of production: the unused factory, the failing enterprise, the idle machine" (Martin 2001, 45). Fear that the "infertile woman" isn't "reproducing, carrying on the race, preparing to remain at home with the kid, and providing a secure, warm womb to foster a man's sperm" (Buddhavarapu, 2019) is at the heart of Emily Martin's fascinating study of medicine's relationship to society, which combines an anthropological approach with historic, sociological, and feminist research.

Although Foucauldian bio-power is valuable analytic for investigating how patients with metabolic illnesses are instructed to lose weight, it does not entirely explain for how people react to these injunctions (Vleming, 2018). The Foucauldian method is essential to comprehending body norms and standards, their imposition through systems and institutions, and how they interplay with a nonconforming body (Ali, 2019). Foucault concept of Bio-power is useful to understand the body norms, illustrating that how standard of physical fitness, norms of feminine, and obstetrical procedures all lead to the production of "docile bodies" (Pylypa) . One-way bio-power wields power over life is by normalising discourses well about body (Foucault, 1984). Drawing on Foucault, Harris (2005, 514) observes how "standards of normalcy are established, which influence how somebody works on the self"; this work on the individuality becomes a not only an issue of normativity but also of morality, as "the disciplining of morality, exerts control by adhering the labels of 'normal' and 'abnormal' to bodies and behaviours" , a labelling that is facilitated particularly by biomedicine (Vleming, 2018). Similarly, to Foucault, Nova's & Rose (2000, 491) used the term "somatic individuality" to explain how "current advancements there in life sciences, biomedicine, and biotechnology are related with a general' somatization' of personality in a variety of activities and forms of thought." "Individuals are more required to design life strategies, to aim to improve the life chances, to perform acts or abstain from activities in order to enhance the standard of their lives, and to conduct responsibly in regard to themselves and others," they write (Vleming, 2018). Researcher focus in management techniques and decisions is inspired by Foucault's theories on agency, which frame their relationship to societal .and cultural contexts.

Also draws the concept of Bourdieu "habitus" as useful, as Bourdieu describes habitus as a collection of internalised dispositions and behaviours that are shaped by and influence experiences and social systems (Bourdieu, 1977; 1990). Through internalisations, habits, and every day practises, the habitus links cognition, experience, embodiment, and the social environment. This study regards the physical experienced of PCOS as part of an individual habitus that is located within, and perhaps reproduces, a collective habitus which shapes PCOS behaviours and attitudes. According to the research on PCOS, the condition's repercussions are as important to the constellation as its medical symptoms (Ali, 2019). PCOS has an impact on how women see their bodies. It can have an impact on how women interact with others and their relationships. The aforementioned themes have been consistently highlighted in qualitative research on PCOS, however there is still a paucity of in-depth, subjective, &

contextual information. Techniques that are well-suited to interpreting things interpretatively and phenomenologically, such as ethnography, are much scarcer in PCOS literature.

2.5 The Theoretical Framework

Specifically, "The Women in Body" by Emily Martin (2.5.1).

According to the martin's point of view on women in body, researcher has applied the concept in my research as addressing PCOS seriously and promptly when it affects fertility is similar to severing a woman from her womb. In order to cope with threat to society's posterity, the patient's own long-term health problems are ignored (Buddhavarapu, 2019). She investigates cultural depictions of female biology. Thus, she explicates how cultural depictions are created inside a scientific/medical and hierarchy model that is more or less divorced from women's lived experience, how well these images are crucial in the construction of women's perceptions of their own bodies, and how we can learn from women's own experiences (Hahn R. , 2009). Martin observes that our attitudes around menstruation are often negative and sexist. Since the egg is not implanted and the female's uterine tissues continue to "break down" or "peel off," we tend to conceive of menstruation as a failure. Martin attributes this view to language and cultural gender bias, pointing out that terms used describe menstruation indicate failure, dirtiness, structural collapse and destruction, and wound. This wound image is strengthened by the fact that the woman bleeds or may experience pain and discomfort during menstruation. Martin believes that menstruation is a natural physiological function and procedure (rather than a nasty thing or a "hidden disease") that should be considered as a success, i.e., the female body's success in preventing conception and cleansing itself of potentially hazardous substances from the uterus. Our language and culture, however, hinder this. Such bias against women is also accountable for our inclination to "praise" male for their "wonderful" capacity to generate a big volume of sperm, despite the reality that sperm is far less expensive to make physiologically than eggs, and sperm has an extraordinarily high death rate with in female reproductive tract.

While both men and women experience hormonal surges, women are easier to target because their hormonal waves can be attributed to her menstrual cycle. This is the fear of how a "infertile woman" is not reproducing and thus not carrying on the race.

Using Martin's Theory (Figure 1)

Beyond physical symptoms, women with PCOS may experience difficulty with fertility, mental discomfort, and social shame. These socio-psychological issues can have a significant impact on a woman's sense of self-worth, relationships, and overall well-being. The present conceptual model was developed by the researcher; the idea came from Emily Martin. Martin's Theory emphasises how the medicalization about women's bodies may obscure individuals' subjective feelings and lived realities.

Habitus as Conceived by Bourdieu (2.5.2)

Bourdieu's theories on habitus are useful for understanding the relationship between one's everyday practises and the physiological experience of polycystic ovary syndrome (PCOS). Habitus, according to Bourdieu, is "a subjective but nonetheless individual system of internalised structures, patterns of perception, conception, or acti" Both the subject's (common) worldview and their (individual) "apperception" of the environment in which they live are shaped by the subject's "internalised structures" and "schemes of perception" (Gillespie, 2019). The habitus integrates knowledge, experience, embodiment, and the social context through internalisations, habits, and routines. Researchers have thought of PCOS as a real-world phenomenon embedded in and perhaps reinforcing a larger habitus that determines PCOS-related behaviour and outlook. The study's predictions about the shared PCOS habitus were grounded in prior studies and ongoing fieldwork, covering topics such as the intersections between the medical sector (responsible for the identification, diagnosis, measurement, and management of PCOS), public attitudes towards health, cultural conceptions of gender, femininity, and masculinity, and first-person accounts of living with the condition.

Figure 2: Using Bourdieu's Theories

The theoretical scaffolding constructed by the researcher, inspired on Bourdieu's work. Bourdieu's concept of habitus highlights the role of social institutions in shaping individual behaviour. Attitudes and actions of people with PCOS may be affected by the cultural context in which the disorder exists, including standards of attractiveness, discrimination, and a lack of knowledge. The internalisation of social and cultural norms may have repercussions for individuals' sense of self-worth, motivation to seek medical care, and social interactions. Medical professionals may have an effect on the PCOS patient's behaviour. Their perspectives on healthcare systems, trust in medical professionals, and health-seeking habits may be influenced by their interactions with the healthcare system throughout their illness. When we apply the concept of habitus to the issue of PCOS, we can see how people's perspectives and

actions are shaped not just by their individual experiences but also by the larger social and cultural milieu in which they find themselves.

2.5.3. "Bio-power" by Michael Foucault.

According to the current understanding of PCOS, there is a connection between PCOS and socio-psychological problems such anxiety, stress, and social stigmas. We need to investigate women's real-world experiences since, as research and literature show, they have been systematically devalued in our culture. The "Bio-power" of Foucault, as applied in the present theoretical framework, elaborates on this idea by focusing on three areas of everyday bodily activity among men and women and showing how standards of physical fitness, norms of femininity, and obstetrical procedures all contribute to the creation of "docile bodies" (Pylypa). Two types of discussion have emerged as a result of our collective fixation on being physically fit, thin, and healthy. The first type of discourse deals with health and includes both the expertise of medical professionals and general discussions about medicine and health. According to this discourse, a lean and healthy body is ideal, whereas a fat and unattractive one is unhealthy and abnormal (Pylypa, 1998).

In this study, the term "overweight women" refers to those who, despite their best efforts, have not been able to reduce their body mass index to a healthy level. The inability to lose weight without the help of medicine or other forms of physical activity is a result of this syndrome. However, one would wonder why they should bother with trying to always appear their best. The researcher's application of the theoretical model provides a straightforward answer to this question: cultural norms and standards attached to the female body make it crucial for the survival of single women and young women to maintain an appearance of health and beauty. This concept was defined by the current study as follows: societal and cultural pressures implant the need for self-surveillance and an ideal body image, creating the sense of empowerment or rejection while concealing their restricting nature. The pressures of society to conform to conventional ideas of beauty and to have a positive body image might amplify the mental health problems that women with PCOS already face. The present study argues, using the pillars of bio-power and somatic individuality, that PCOS discourses centred on controlling symptoms through "lifestyle changes" imply that the PCOS body is abnormal and flawed - too fat, too hirsute, too masculine - but that the body can be brought under control through these changes and thus made to fit normative femininity expectations. These messages imply that women have a responsibility to take care of their bodies since they are seen as a reflection of

their femininity and, by extension, their health. Therefore, avoiding societal norms for conformity, body image, and psychological stress is an important part of PCOS care, allowing for better long-term control of the condition.

Figure 3: Putting Foucault's Ideas to Use

Researcher-created conceptual model; Michael Foucault inspiration. Discipline methods used in biopower work to alter individual conduct so that it conforms to societal norms. Women with PCOS may be counselled to make dietary and exercise modifications to better manage their symptoms and reduce their risk of acquiring secondary health complications. These routines are an effort to mould their bodies and habits into those considered optimal for health at the present time. Biopower includes the ability to regulate the flow of information and expertise. The education of patients on PCOS and its treatment is mostly on the shoulders of healthcare professionals. Women's decisions on therapy and lifestyle changes may be affected by the data offered here. The medical community and its practises are influenced by biopower in how they treat PCOS. Medicalization of PCOS refers to the establishment of PCOS as a pathological disease requiring professional medical care. Through this method, women's PCOS experiences are transformed into medical cases that may be managed and regulated by professionals in the medical field. Foucault's idea of biopower might be applied to the treatment of PCOS to provide a critical analysis of the ways in which dominant social norms and practises shape women's lives and decisions regarding their health. This information raises questions about how medicalization and standardisation might limit people's freedom of choice and control when it comes to managing PCOS. In addition, it stresses the need of considering patient perspectives and advocating for more patient-centered approaches that acknowledge the intricacies and diversity of experiences related to pcos.

3. RESEARCH SETTING AND METHODOLOGY

In May 2022, the commencement of the research was initiated. The researcher, a Pakistani woman, had familiarity with various accounts of PCOS experiences among women. The awareness extended to the cultural backdrop and prevailing perceptions of PCOS within Pakistan. The researcher possessed a background in the medical perspectives prevalent in the region, having engaged with diverse medical systems.The research strategy involved residing in Chakwal, enabling participant observation within a local network. In accordance with the devised plan, research activities were initiated in Chakwal. The focus encompassed two privately-owned gynecology clinics and one government-operated clinic.Within this section, the forthcoming discourse pertains to the objectives, research inquiries, and the selected methodology for fieldwork. Subsequently, the recruitment procedure and chosen techniques for data collection will be delineated.Finally, researcher discusses the ethical parameter of research.

3.1. Locale at Macro-level

Figure-1 Chakwal Map

Source- (Map, 2016)

The Chakwal district of Pakistan's Punjab province was the site of this research. Near Talagang and Kalar Kahar is the little city of Chakwal. Located in northern Punjab, in the Dhani area of Potohar, is the city of Chakwal. Once known as Chaudary Chaku Khan, the city changed its name to Chakwal in 1904. The city of Jammu was established in 1525, during the reign of the Mughal emperor Zaheerudin Babur. A tehsil headquarters since 1881, it was elevated to district status in 1985. Chakwal has a rich history and is surrounded by the ancient civilisation of the Soan people. Chakwal city is more urban than rural in character. The valley is also well-known for its significance in the military (District Chakwal, n.d.). Chakwal also has a widely varied medical infrastructure. People of all walks of life have faith in all systems, whether they be allopathic, homoeopathic, or ayurvedic. There is a single hospital in DHQ and numerous private clinics of varying sizes. Chakwal's PCOS sufferers are best served by seeing gynaecologists and endocrinologists, so I was directed there.

Figure-2 New Chakwal City

Source- Fieldwork

Locations in Chakwal's Past

The gorges of Thirchak-Mahal are a beautiful part of Chakwal's landscape. There are both natural and artificial lakes in the communities nearby. Located 3,500 feet (1,100 metres) above sea level, a shrine called Chehl-Abdal can be found atop this hill. Kalar Kahar, perched at an altitude of 2,500 feet (760 metres), is another favourite among visitors.

The district overview for 2020 says that the famous temple fort of Katas Raj is located nearby. The Sohawa route links Chakwal to Jhelum, which and Lahore by car. Indeed, Chakwal is a

semiarid region with little access to water for farming and irrigation. Almost 70% of the workforce is engaged in agriculture, the vast majority of which is rain-fed subsistence farming. Most communities do not have access to a reliable source of irrigation (District Overview, 2020).

During the Mughal era, seven different tribes called this area home: the Mair Minhas, the Awans, the Imperial Kassar, the The work of Bhatti Rajputs in particular the Waince, the Khokhar the Rajputs, and the Kahut Quraish (Chakwal, 2016).

Additionally, Chakwal is a major military centre. Many locals are active duty military personnel. Its history is rife with acts of valour and heroism, and it has produced many military leaders and combatants (Chakwal, 2016). Agriculturally speaking, Chakwal is renowned worldwide for its high-quality barley and wheat crops, citrus fruits, sugar cane, and other produce. Both Choha siden shah and Kallar Kahar cultivate vast areas of loqat on their farms. Coal and salt mines are also present, with the majority of mines being owned and operated by locals (Chakwal, 2016).

Salt mine

Chakwal is a region of the Barani area located at the start of Pothohar Plateau as well as the Salt Range. The topography is largely hilly with scrub woods in the south-west (Chakwal, 2016). The mine's history stretches back to 320 BC, when Alexander the Great's army discovered it. However, the Janjua-Raja' tribe began reported salt mining in the 1200s (Khewra Salt Mine, n.d.). The mine began trading during the time of the Mughal Empire and has been a significant supplier of salt ever since (Dylan, 2009). This Khewra Salt Mine becomes a famous tourist destination, attracting up to 250,000 tourists every year (Khewra Salt Mine, n.d.).It is conveniently accessible through the highway and provides guided excursions to guests. The mine includes the Badshahi Mosque, tiny copies of prominent sites, and the Assembly Hall, all built of salt bricks (Dylan, 2009). The mine's salt reserves are anticipated to range from 82 million tonnes to 600 million tonnes (Khewra Salt Mine, n.d.). The salt reserves are estimated to be 6.687 billion tonnes in total (Dylan, 2009).

Touring the Khewra Salt Mines is a once-in-a-lifetime opportunity to explore the subterranean salt formations, understand about the origins of salt mining, and see the mine's amazing salt architecture.

Topography

Chakwal is a region of the Barani area located at the entrance of - Pothohar Plateau along the edge of the Salt Range. The topography is largely hilly with scrub woods in the south-west (Chakwal, 2016). Chakwal's several villages used to have sizable Sikh & Hindu populations. Their Sardars of Vahali lived in Vahali village, the center of the Vahali state. The Sardars were not just the landowners of Khewrah's salt mining, but they also held high positions in Punjab and Kashmir's courts (Dhakku, 2017).

Sardars of Vahali travelled to Shimla for a few moments during the summer of 1947, but they were never allowed to return, Vahali had been reduced to ash. The abrupt outbreak of violence was a dramatic contrast to the prior state of calm and tranquillity in Vahali. Frightened Hindus hurried into Sardar Hari Singh's Maari (a large home with over a hundred rooms), thinking that the rioters wouldn't really assault them because of Singh's influence. However, Muslim rioters set fire to the Maari, killing around 200 Hindus, included women and children (Dhakku, 2017). The governments of India and Pakistan, however, have not made the effort to erect a monument at the Wagah border to honour the casualties of the bloody riots. However, the older folks of Chakwal's villages linger in the thoughts of their non-Muslim companions (Dhakku, 2017). “Senior inhabitants of Pakistan relate what they observed during that dreadful moment seven decades afterwards” (Dhakku, 2017).

Chakwal's district villages have a pleasant way of life. Several residences have water wells, and some newly constructed homes have cutting-edge water extraction equipment. The architecture of ancient homes differs from that of modern dwellings. In villages, there are both ancient and modern houses (Chakwal, 2016). Mostly people from village so they speak Punjabi, as well as Urdu.

Religious importance

The area has religious importance for both Hindus and Muslims. The location has the famed Kitas temple, which is referred to in sacred book of Hindus Mahā Bharat. The temple contains a hundred staircases and gloomy meditation chambers. According to legend, a subterranean passage goes to Chakwal. During his stay, Al Bairuni, an eminent scholar, learnt Sanskrit and determined the radius of the Earth. Chakwal is also known for sectarianism: Shia’s, Sunni, and all other (History of Chakwal, n.d.). The Chakwal mosque explosion in Punjab, Pakistan, in 2009, claimed 30 lives and injured 150 people by striking a packed religious gathering during a religious assembly (2009 Chakwal mosque bombing, 2009).

Figure-5 Mosque

Source- Fieldwork

Healthcare centers

Figure-4 DHQ Hospital

Source- Fieldwork

Chakwal's health system includes a variety of health care facilities and amenities to meet the population's medical requirements. Chakwal shared a number of hospitals government and privates, one of the famous of them is DHQ hospital Chakwal. Organizations such as the Falah Foundations are working hard to improve the health care system in Chakwal. They work to provide healthcare services and assistance to the most vulnerable members of society (Falah Foundation, 2020). Chakwal boasts a variety of healthcare facilities that cater to the requirements of the local people, including basic healthcare centers, dispensaries, and medical labs.

The DHQ Hospital Chakwal was originally founded as the BHU in 1884, upgraded to the THQ in 1954, then to the 125-bed DHQ Hospital in 1986, and finally upgraded to the 205-bed hospital in 2015. DHQ serves all the facilities and also held camps and other awareness programs related to health. DHQ Hospital Chakwal offers emergency and outpatient treatments to its patients on a regular basis.

They cover all the department of medical science, specially gynaecologist as per my focus. There are so many other private clinics such as Hayat hospital, city hospital, care hospital, Murad medical clinic, Abbasi hospital etc. but as per my focus, the field work conducted in care hospital located in Bypass opposite alharam marbles Chakwal, Saima gyne clinic located Dhaku road, and in DHQ hospital main Talagang road. They are concerned with mother health throughout pregnancy and delivery. The following are some of the most common issues that gynaecologists deal with, Menstrual cycle, fertility, pregnancy, and menopause-related issues, Family preparation, Issues with the ligaments, tissues, or muscle that sustain the pelvic area., Diseases Widely spread Via Sexual Contact (STIs), Polycystic ovarian syndrome (PCOS), Inability to control one's urination or faeces, and so many others (oladoc, 2020).

Figure-5 Care Hospital

Source-Fieldwork

The researcher picked Dr. Sobia Mumtaz, who is among the most recognised gynaecologists in town, for an interview at Care Hospital. The primary informant, Abida Amjad, a hospital employee, was also chosen from Care Hospital. She supported the researcher with PCOS patients and gave assistance throughout fieldwork.

Dr. Sobia, an eminent gynaecologist, treats a large number of PCOS patients on a regular basis, comprising both married and single persons. Furthermore, Saima Gynae Clinic, which is situated on Dhaku Road in my neighbourhood, is a tiny clinic that treats PCOS patients. Because of her local fame, Saima's clinic was specifically picked for the fieldwork.

Individuals were chosen at random at DHQ Hospital since it is a government hospital with a large influx of patients every day. These doctors, particularly ones at Care Hospital, give excellent medical care. Saima Gynae Clinic, on the other hand, is on a smaller scale and prefers to send patients for exigencies and specific instances like as basic procedures of ultrasounds, however they also provide medical care and therapy.

Homeopathic College and Hospitals

In alongside medical specialists, some people prefer herbal and homoeopathic remedies. Surprisingly, a sizable section of the Chakwal population prefers homoeopathic therapies, prompting the construction of several private clinics to meet this need.

Chakwal medical college is renowned for its homeopathic and herbal treatment, they also serve 4-year degree program for students specially girls. BHMS stands for Bachelor in Homeopathic and Surgical Sciences. One can choose between BHMS classified, a thorough 5-year curriculum, and BHMS graded, a shorter 2-year programme. To be eligible, students must have completed pre-medical studies in high school. The Diploma of Homeopathic Medical System (DHMS) is a less demanding curriculum. It is a four-year curriculum with a six-month internship requirement at the conclusion. Homeopathy in Chakwal examines a patient's symptoms and offers the appropriate drug or therapy. They utilise surgical or medicinal methods based on the degree and condition of the ailment or illness. On the other hand, if a medical condition is beyond their area of competence, they refer to certain other professional healthcare experts. One might also go to a Homeopathic doctor to learn concerning the risk factors associated in certain diseases and what preventive actions you can take to live a healthy life. Many people prefer to visit with a Homeopathy practitioner of the same gender (Homeopathic in chakwal, 2017). For the purpose of fieldwork, researcher has chosen Dr. Farzana as my homeopathic doctor. She had a small clinic of homeopathy and specially deal with fertility issues, PCOS, and cover all gynaecological practices. She also taught in medical homeopathic college about gynaecology at morning and spend quality time with patients and students there.

Overall, homoeopathy looks to be a popular kind of alternative treatment in Chakwal, with multiple homoeopathic physicians and clinics open to the public. Furthermore, the establishment of a homoeopathic medical college within the area implies that there is a rising interest in homoeopathy as a subject of study and practise.

3.1.1. Locale at micro-Level

- **DHQ hospital Chakwal**

DHQ Hospital Chakwal would most likely have a team of gynecologists on duty to serve the region's women's healthcare requirements. Gynecologists specialize for the female reproductive tract along with are qualified to provide a wide variety of treatments, including

postnatal and prenatal care, planning a family, reproductive health counselling, and the identification and management of various gynecological diseases. This research goes inside the hospital's gynecological department, revealing insight on the number of gynecologists and the government-funded services they provide to patients. It was strictly banned to take picture inside the hospital specially at gynecologist department to save the security of patients.

There are 2 rooms for Specialists Gynecologists, whereas one large is cover by junior doctors. Near to that is a ward and attached labor room for patients that is only available for female. DHQ Hospital Chakwal's gynecological department has a staff of experienced and committed gynecologists. There are three gynecologists on staff at during the course of this fieldwork, each having a thorough awareness of women's health concerns, pregnancy, delivery, and reproductive health. These professionals serve a critical role in safeguarding the health of women of all ages and treating their specific medical problems. These doctors were cooperative to guide and tell researcher about the problem usually patients come with. Unfortunately; PCOS is one of the major problems seen among patients during the field. From DHQ, 3 patients were recorded by the researcher and they are willing to give interview.

- **Care Hospital Chakwal**

As a privately owned hospital in the center of the city, Care Hospital Chakwal is carving out itself as a famous healthcare institution, providing to a wide spectrum of medical requirements. This hospital is specially made for reproductive health problem faced by women so majority of the area covered with gynecological department. The gynecological department has main office for doctors and nurses, while other 7 are for patients who privately owned the room. However, there is one wardroom for other patients. The hospital's gynecological department, directed by the skilled Dr. Sobia, has made considerable achievements in resolving the everyday issues associated with Polycystic Ovary Syndrome (PCOS).

The Hospital gynecological department is manned by a team of trained medical experts dedicated to delivering comprehensive and compassionate treatment to women. Gynecologists, nurses, and support workers collaborate to establish a patient-centered environment that serves the unique requirements of women's health. Dr. Sobia and her staff at Care Hospital Chakwal understand how important it is to manage PCOS on a daily basis because its impact on women's life can be substantial. Period irregularities, hormone abnormalities, and the appearance of tiny cysts on ovaries are all symptoms of PCOS. It can cause reproductive problems, gaining weight, and other health problems.

- **Dr. Saima Gyne Clinic**

The Saima Clinic serves as a basic healthcare center with insufficient resources. Her clinic is located at Madina Town, Chakwal and she privately owned the clinic. As it was renowned clinic in the area that's why researcher chose this as field work. The clinic's physical facility is tiny, yet its influence extends well beyond its four walls. With a sole focus on PCOS management, Saima Clinic has established out a community niche as a refuge of support and help for women suffering with this difficult illness.

At the heart of Saima Clinic is Saima herself, a dedicated healthcare professional who wears multiple hats. Saima serves as the clinic's sole practitioner, administrator, and empathetic listener. Her commitment to her patients and her unwavering resolve to address the nuances of PCOS demonstrate her exceptional dedication to women's health.

Despite the clinic's limited resources, Saima has ingeniously transformed her space to accommodate the unique needs of PCOS patients. The clinic may lack the cutting-edge equipment of larger institutions, but it compensates with a wealth of compassion, personalized attention, and a deep understanding of the challenges PCOS presents.

- **Dr. Farzana Homeopathic Clinic**

Dr. Farzana is a passionate homoeopathic lady doctor who approaches healthcare holistically and naturally. Her clinic is privately owned located at Dhaku Road in Chakwal. She provides personalized therapies which concentrate on the body's intrinsic ability to heal itself, drawing on her extensive understanding of homoeopathy and herbal medicines.

Dr. Farzana's compassionate personality and dedication to understanding her patients' unique requirements make her a highly sought-after practitioner, particularly when it comes to treating illnesses such as Polycystic Ovary Syndrome (PCOS). She encourages providing gentle and effective remedies for PCOS and an array of health conditions through her experience in homoeopathy and herbal therapy, encouraging general well-being in a peaceful and harmonious manner.

CHAPTER 3.2. RESEARCH METHODOLOGY

3.2.1. Methodology

Phenomenological research is an approach to understanding and describing a phenomenon's universal core through qualitative methods (Dumlao, 2018). This approach delves into people's everyday experiences without the researchers bringing any preconceived views to the table. To learn more about how people make sense of their own experiences, phenomenology researchers look into people's actual lives (Dumlao, 2018). Researchers have used the terms "subjective" and "individual" throughout this work; phenomenology is the paradigm from which these terms are derived and defined.

Phenomenology is the study of phenomena (Ali, 2019) through the creation of detailed, subjective descriptions of these occurrences. Each person's knowledge of conscious experience is layered with meaning and intentionality (Ali, 2019), which is what phenomenologists mean when they talk about subjectivity. The phenomenological paradigm can be traced back to the writings of philosopher Edmund Husserl. He established the ontological stance in phenomenology and the idea of a subjective awareness as the source of all meaning. Husserl's contribution to existential phenomenology rests on his theory that, according to Husserl (1958), reality is understood and so produced through consciousness and experience. Phenomenology is at odds with positivism, the early paradigm of the social sciences, because it does not postulate an objective universe that is independent from the perceiver or any objective truth (Ali, 2019).

The subjective approach provided by phenomenology allows PCOS to be studied without resorting to broad generalisations. Again, phenomenology is useful since it takes into account the importance of medical and biological considerations in the context of PCOS. Instead, it incorporates these factors as inherent to the event itself, recognising the value of both natural scientific explanations and first-hand experience in making sense of a phenomenon (Englander, 2012). Despite the fact that the technique's overarching purpose is to document participants' unique sentiments, its practitioners recognise that they, too, must participate in the meaning-making process (Hammersley, 2005). In his 1962 work "Phenomenology of Perception," Merleau-Ponty places the body in its proper context as the setting for experience. Feelings, experiences, and even precognitive schemas all take place in the physical form; perception itself has its roots there. Inhabiting the world and always interacting with it, the body is a dynamic presence and process that shapes experience. Because of the body's intersubjectivity,

we can understand how other people's bodies feel. The universe makes the body understandable, and vice versa, according to Merleau-Ponty (Carman, 1999).

To learn more about what it's like to have PCOS in real life, researchers conducted in-depth interviews. Discursive records, in this case of verbal and in-person debate, are provided via interviews in the form of transcripts. Various reactions are prompted by the use of language that is either successful or appropriate in reflecting genuine experience. Discovering what a period of history means to a group of people and how they experience it is central to qualitative phenomenological research (Dumlao, 2018).

3.2.2 Moral considerations

The research proposal was written and approval was granted by the Ethics Review Board at Quaid-e-Azam University before the study began. Informed permission, privacy, and secrecy were only few of the many ethical issues that were taken into account during the course of the inquiry. No funding was sought from any other sources in order to carry out this research.

Each participant signed a consent form before the researcher began their interview. Participants were given a succinct summary of the study's aims and asked to sign a consent form indicating that they understood and agreed to the study's procedures. All participants were given verbal assurances that their responses would be kept private and that they could end the interview at any time if they so chose.

This study's definition of PCOS carries a medical meaning; yet, depending on one's upbringing and the current social and cultural climate, it may also be connected with shame, stigma, or a need for solitude. The researcher made sure that respondent anonymity was maintained to prevent any feelings of embarrassment, loss of privacy regarding health conditions, social interactions, or damage to reputation or social status. This was achieved by conducting separate interviews with each respondent so that they would feel more at ease discussing the topic at hand.

Each responder was given a pseudonym before any data transcription began, and this alias remained in use throughout the duration of the study. Participants' adoption of arbitrary pseudonyms has occasionally yielded hysterical results. However, anonymity was granted in accordance with the current investigation. Careful archiving and preservation efforts were made for all collected data, which included interview audio recordings, transcripts, and email exchanges.

Technique qualitative, 3.2.3

This study uses qualitative research methods to provide an in-depth examination of the subject. The people who took part in the study hail from a wide range of Chakwal-based field sites. These facilities included the DHQ Hospitals' Gynaecology department, the Saima Gyne Clinic, and the Care Hospital, as well as the DHQ Hospitals' Obstetrics and Gynaecology department in Civil Lines.

Forty people were chosen at random to participate in this study. Twenty patients with PCOS were included in the sample, with the remaining participants being members of the patients' families and social networks. Twenty people, including 13 single and 7 married women, met the criteria for a PCOS diagnosis. In addition, four participants, all mothers-in-law of the patients, took part in a focus group discussion.

3.2.4 Systematic sampling

Non-probability sampling, in the form of purposive sampling, has been utilised in qualitative research. "On purpose" selection of units is at the heart of the purposive sampling process. This approach to sampling, also known as judgemental sampling, relies on the researcher's discretion in identifying and selecting participants who will provide the most valuable data for achieving the study's goals (Nikolopoulou, 2022).

When performing preliminary research, phenomenological methods allow us to collect data rapidly and obtain a sense of the landscape. Purposive sampling has been utilised because researchers want to learn about a particular viewpoint. About 40 women with PCOS participated in the study, 20 of whom met the criteria for a clinical diagnosis and were separated into married and single groups for the purposes of exploring the syndrome further by FGD.

The following is a demographic breakdown of 20 respondents who have been diagnosed with PCOS:

3.2.4.1. Demographic profile of Respondent

Table 1

S.no	Categories		Frequency N=20	
1.	Number of participants	Married	7	20
		Unmarried	13	
2.	Age	Married	20-35	Between 20-35
		Unmarried	20-30	
3.	Education level	Up to college	5	
		Up to university	15	
4.	Family structure	Nuclear	8	
		Joint	12	
5.	Family income	15,000-30,000	10	
		30,000-45,000	10	
6.	Profession	Housewife	4	
		Teaching/studying	5+11	16
7.	Family history of PCOS	Married	3	
		Unmarried	5	
8.	Children	Married=7	2	
9.	Ethnicity	Punjabi	18	
		Pashtun	2	

3.2.5. Participant Observation

Participant observations is a method of qualitative study in which the researcher immerses oneself in the setting and context being researched, actively engages with the participants along with their actions, and observes events as they occur naturally. This method enables the researcher to obtain a thorough grasp of the examined setting's social dynamics, behaviors, interactions, and cultural subtleties (Calhoun, 2002).

The researcher is a part of the social context through participant observation, typically spending a considerable amount of time among the participants to understand the complexities of what they have to say. As the researcher choses to live in Chakwal, during fieldwork for extended period of time to understand their actions. It was keenly observing the way practitioner deal with patients in hospital as well as the reaction of respondent. To capture observations for analysis, detailed notes, recordings, pictures, and other types of documentation are employed.

3.2.6. Key informant

To provide the necessary support and insights for present study, it was sought the engagement of a key informant. This individual played a pivotal role in assisting me with the selection of participants from the field and facilitating the interview process. The present study chose to identify a key informant from Care Hospital due to its substantial size and the potential to access the specific target audience of interest.

Key informant interviews involve engaging individuals who possess comprehensive and well-informed perspectives on specific aspects of the program or topic under investigation. This method offers a cost-effective means of obtaining a comprehensive overview of the issue at hand. By tapping into the knowledge and expertise of individuals who possess relevant insights, key informant interviews serve as a valuable tool for obtaining essential information. These interviews often unveil unforeseen challenges and introduce novel concepts that might not have been anticipated beforehand (Key informant interviews, 2020).

This study chosen key informant was someone familiar to researcher, thereby ensuring a level of familiarity and cooperation. This individual generously offered their assistance without any financial compensation. Employed as a staff member within the hospital, key informant was well-versed in the intricacies of patient interactions and exhibited a solid grasp of pertinent information. This collaborative approach enriched the research process, aiding in the collection of meaningful data and insights from an informed perspective.

3.2.7. In-depth interviews

This research use in-depth interviews as a qualitative technique. Due to the delicate nature of the subject, a one-on-one interview format has been selected. Conversational methods are more likely to win over participants' confidence and, as a result, get more in-depth responses (Bhat, n.d.). These kind of semi-structured interviews were also employed to probe the why.

Because of the flexibility they provide, semi-structured interviews are a useful tool for researchers doing qualitative investigations. This allows them to expand their research into new areas and delve deeper into existing ones. Semi-structured interviews contained elements of both structured and unstructured interviews. With only a general concept of what to ask, the interrogator uses the respondent's answers to dive deeply into other questions (George, 2021). Participants signed a consent form allowing me to conduct an in-depth observation of their daily lives and/or participate in a half-hour semi-structured interview. The participant was given the option of selecting a pseudonym to be used in place of her real name whenever it was necessary for me to make reference to her in this investigation. The interview questions prompted the respondent to reflect on and make sense of the social and emotional experiences she encountered as a child and adolescent in Pakistan.

3.2.8. Rapport building

In the course of practice, it was noted that participants looked to me to steer the conversations while in interview mode' with the recorder activated. After the audio recording was paused, participants often continued speaking to me, a practice that allowed for what was referred to as 'rambling' by one participant. It was also observed that moderate encouragement in situations where participants exhibited hesitance or discomfort facilitated the sharing of their narratives, including emotionally significant experiences. The establishment of rapport played a pivotal role in this process. Increased interaction with a participant corresponded to a greater likelihood of them sharing meaningful experiences.

Limited time and the repetition of isolated conversations made it difficult to develop a strong trusting relationship with the participants. The interviews lasted for about an hour, but that wasn't enough time to really get to know each other. Confidentiality promises made over the phone were only partially successful. In phenomenology, where time and space play a role in making sense of experiences, this idea emphasises the temporal aspect recognised within the field. The hour-long length stayed squarely on planet Earth. The researcher drew on the tales of her immediate family members (sisters) with PCOS to enable dialogue and create rapport. The commonality of these experiences paved the way for the development of trust.

Understanding that the things under study were common ground helped people feel more comfortable talking to one another. Additionally, efforts were made to schedule follow-up meetings for those people who showed an interest. The outcomes of this method were really beneficial. Interviews conducted after the initial session revealed that the participants were noticeably more at ease, often expressing openly emotional replies to comparable questions. This demonstrated the significance of making and maintaining intimate relationships with the attendees.

3.2.9. Probing

During the process of conducting semi-structured interviews, the technique of probing proves to be instrumental in delving deeper into the subject matter and extracting intricate details. Constructing probing questions involves a meticulous analysis of the context to determine their appropriateness. Apart from eliciting additional information from the participant, this technique contributes to the cultivation of trust between the researcher and the participant.

By strategically incorporating probing questions, a researcher can effectively navigate through the layers of the participant's responses. This aids in uncovering insights, perspectives, and experiences that might remain unexplored through surface-level inquiries. Probing questions offer a means to explore the nuances, emotions, and motivations underlying the participant's narrative.

Moreover, the process of probing fosters an atmosphere of openness and collaboration. Participants recognize that the researcher is genuinely interested in comprehending their viewpoints, which enhances their willingness to share candidly. As trust develops over the course of the interview, participants are more inclined to reveal sensitive or personal details that contribute to a richer understanding of the subject matter. In essence, probing questions act as a bridge connecting the researcher and the participant, enabling a more profound exploration of the topic while also nurturing a rapport based on mutual respect and shared inquiry.

3.2.10. Audio recording

The interview site was chosen to ensure impartiality, security, and confidentiality. This approach was adopted to guarantee privacy, secrecy, and comfort, as well as minimize distractions during the interview process. Given my familiarity with two participants beyond the scope of this study, their second interviews were conducted within their respective homes. The duration of each participant's interview ranged from 1 hour to 90 minutes. All audio

recordings were made using a phone and were promptly transferred to a laptop or PC for storage.

3.2.11. Daily diary

The utilization of a daily diary aids in the organization of activities and the monitoring of data. The technique of maintaining a daily diary was also employed to record day-to-day occurrences throughout the research duration, serving as a comprehensive record of events.

3.2.12. Jotting

It is widely acknowledged that human recollection is limited and that individuals seldom retain memories over extended periods of time. Therefore, the practice of jotting down notes proves invaluable in preserving past experiences, as researchers diligently record them. During the course of this study, a daily diary was consistently maintained, readily accessible, and utilized to capture immediate notes on various occasions.

3.2.13. Photography

The researcher used photography as a nonverbal mechanism tool during field intervention to capture and preserve informal data about subject and the location.

3.2.14. Field notes

Keeping this principle in consideration, the researcher employed the field notes technique to meticulously record every piece of encountered information throughout the entirety of the study. Through the practice of taking field notes, the researcher ensures the preservation of events, interactions with respondents, and interactions with the public. This method holds significant value in facilitating effective data collection by allowing for the recollection of crucial details.

3.2.15. Focus group discussions

The utilization of focus group discussions proves highly advantageous for efficiently obtaining diverse viewpoints on specific themes. This approach involves conducting interviews with groups of individuals to gather information, thereby mitigating the risk of potential omissions if one participant chooses to withhold certain information. It is paramount that the group exhibit diversity, ideally comprising participants who are unfamiliar with one another. In the study, this methodology was employed as a potent means of procuring firsthand data pertinent to the research query.

In the present study, this technique was strategically employed as a robust tool for procuring primary data pertinent to the research question. Four focus group discussions (FGDs) were meticulously selected, comprising the mothers and mothers-in-law of the participants. The rationale behind this selection rested on their unique roles as family members closely connected to the participants. This approach aimed to tap into their distinct perspectives and experiences, enriching the qualitative data collected through the focus group discussions.

3.2.16. Themes

In qualitative research, analysis is not an afterthought; it occurs simultaneously with data gathering and can shape the latter. Unexpected themes or areas of interest discovered during analysis can influence the nature of the questions asked (Maxwell, 2008). It has taken the same adaptable and inductive approach to data collection as is being used now. The researcher's knowledge that a flexible approach was more efficient in gathering the valuable content required for the present study resulted in a gradual loosening of the framework of my interviews as data collection progressed.

The first step in a phenomenological analysis is to convert audio or video recordings of interviews into text, and then to look for patterns within those texts.With this shift, we go from a concentration on individuals' experiences to one on the shared patterns among members of the group. Themes emerge from these recurrent patterns to provide comprehensive explanations of the phenomenon under study. The analysis that follows then returns to specific points of view in order to back up the themes' classification. Resaercher made an effort, as far as possible, to stick to this inductive pattern. Although the data were organised by themes by the researcher, I proceeded with caution in classifying them because of the substantial overlap and connectivity among the themes. These motifs are interwoven and reappearing throughout this text at various points.

3.2.17. Secondary Source

In addition to collecting information from original sources and the research's focal location, the researcher has explored other sources that include newspapers, magazines, and books to get relevant information.

CHAPTER 4: SOCIAL PERCEPTION REGARDING CAUSES AND CONSEQUENCES OF PCOS

In this chapter, the collected data from both clinically diagnosed and undiagnosed female PCOS patients has been unpacked and thoroughly examined. The approach utilized for data representation involved thematic analysis. The data collection process encompassed individuals who had been medically diagnosed with PCOS, as well as those who remained undiagnosed clinically. Notably, researchers refrained from explicitly inquiring whether participants had received clinical diagnoses or were relying on self-diagnosis. This decision was rooted in two primary considerations.

Initially, the researcher exhibited reservations about employing the term 'diagnosis' to validate the participants' PCOS experiences. It was plausible that some women had not sought medical consultation or obtained an official PCOS diagnosis, yet were cognizant of their condition and encountered its effects through alternate means. Secondly, due to the specialized nature of the term 'PCOS' within the realm of biomedicine, individuals acquainted with it likely encountered it in a context linked to healthcare services, irrespective of whether they had received an official PCOS diagnosis.

The interviews were conducted both in person with patients and online through mobile platforms. These interactions were conducted in both English and Urdu, ensuring accessibility and facilitating effective communication with participants.

4.1. Personal and Reproductive Health Perception of PCOS

Medical experts along with patients were among the key sources of information regarding PCOS in my study. While assistance and comfort were provided, uncertainty or an absence of knowledge remained. When researcher asked women throughout the interviews what they felt PCOS was or to clarify or explain PCOS to me, they would invariably state that they were unclear or unsure whether their thoughts were true.

When it came to queries concerning infertility and sterility, there was a continuous gap in knowledge provided by clinicians. To explore the personal perception some were known to this syndrome and some do not aware of it still experiencing the symptoms which are clinically diagnosed. To account for the possibility that the PCOS diagnostic category is not generally understood, researcher asked informants about emerging "women's health problems" as well as particularly regarding PCOS. The study started with a broad question regarding women's

health and proceeded on to the more particular problem of PCOS to see if PCOS would emerge "naturally" as a prominent concern in women's health perspectives.

Firstly, riza was unmarried girl of age 30 had explained who is clinically diagnosed to the syndrome.

"I think woman health should give more focused which is unfortunately, not. There are not enough campaigns in Pakistan what so ever regarding the illnesses most women have. I think mostly women did not aware of this syndrome around me, and there is a need of revision in curriculum"

Tooba was married of 26 age says:

"Aurto ko apni sehat py shadi sy phly he tawjo deni chaeay ku k shadi k bad ak nae zindagi janam leti ha or esi bemario ka hmri maon bheno ny kabi hum sy zikr ni kia to he aj hum is musibat ma ha, mery khayl ma awareness hona bht zarori ha larkio ko PCOS jesi bemario ki"

[Tobas said, women should give focused on their health before getting married because after that anew is came to its form and our mother and sister did not share such knowledge with us that why we are in this miserable situation, so I think there is a need of awareness regarding PCOS should be given to females].

The majority of patients lacked knowledge of the ailment, therefore raising awareness was a major issue for them. Iman, a young woman who has not yet tied the knot, has elaborated, "I think women's health is the most important thing she needs to be given given that she is the only one who satisfies all of the household chores." As I mentioned, I am part of a nuclear family, and I have witnessed both my mother and sister-in-law get up early and put in a lot of effort every day. Second, I had limited exposure to information on the disease prior to suffering through it firsthand.

Mehwish having 3 kids at the age of 32 says:

"PCOS ka mjy ni pta that phly lakin mjy heavy periods aty they ji spy doctor ny mjy btya k mjy pani ki theliya ha or ma heran thi ye kon c bala ha ab? Meri family ma kisi ko esi koi bemari ni thi, mery khayl ma aurto ko is trha ki bemario ka elam hona bht zarori ha aj kal k zamny ma"

[Mehwish said, I did not aware of PCOS before I was experiencing heavy bleeding and my doctor told me that I have water sacs and I was shocked what is this monstrous thing now? In

my family no one is victim of this disease and I think women should need to aware of such diseases in today's world].

Although PCOS does not correspond to indigenous divisions of illness, women's hormone-related, reproductive, and menstrual concerns have always been common in Pakistan. Ayat being a married woman having no kids said that:

"I guess it's a disease of which our people mostly not aware of, as I did not know about this disease before I got it. I was trying to conceive naturally and my husband didn't want for a check-up. Later on, I forced him to get it done for once and finally he convinced. Our doctor, diagnose PCOS even though my period was regular and I am not over weight still I have this symptom because I am too lean. So, my perception is that we need to aware of disease related to reproductive system specially because this lack of knowledge leads us in making difficulties for ourself"

Researcher also found the difficulties faced my married women is far much more then unmarried female in this regard. When contrasted with unmarried women with PCOS, married women may have disparities in overall health, mobility, role restrictions owing to physical health, limitations in their roles due to psychological challenges, pain, social interaction, energy/fatigue, and mental health.

Nida kazmi married for 12 year having no kids, have clinically diagnosed with PCOS in her reports, elaborate her personal perception:

"Meri shadi ko 12 sal ho gay ha par meri olad ni ha, ma Dr. sobia k pas check krwa rhi hu is k leay ku k mery mensis bht zyda hty ha or kahi din tk rukty ni ha. Unho ny mjy btya ha k mery andr jala sa ha jis ka shyd operation krna ho ga us k bad ma conceive kr lu gi. PCOS k bary ma kabi suna to ni ha or na mjy doctor ny kuch btya ha"

[Kazmi said that, it's been 12 year that I got married but I have no kid. I came for check up to Dr. Sobia because of heavy bleeding in my menses and she told me that I have some kind of "JALA[1]" which need to be recover with operation and after that I will conceive. I never heard of PCOS and my doctor did not tell me as well].

Kazmi's experience emphasises the significance of healthcare practitioners alerting patients about their illness and providing them with enough information. PCOS may have a substantial

[1] Jala: term used for layperson and define as a thread or net like material that covers inside ovaries .

influence on woman's way of living, and women who have PCOS may have co-morbidities and have a low self-image. Married PCOS women may have a poorer quality of life as unmarried PCOS women.

4.2. Symptoms and causes of PCOS

Symptoms of PCOS may overlapped because it's a syndrome and many people got different symptom with the logical reason behind that. According to Mishal tyabba who is unmarried and doing MBBS says that:

"I got my hair growth in may face and neck, irregular periods (having resolved that with some extend with diet), fatigue, restlessness. Lack of energy, not good sleep and brain fog"

The following statement summarises various symptoms of polycystic ovarian syndrome (PCOS). Growth of hair on one's face and neck, cycles that are irregular, weariness, restlessness, loss of energy, trouble sleeping, and brain fog are some of the symptoms. PCOS is a hormonal disorder that mostly affects women throughout their reproductive years. PCOS symptoms can range from moderate to extreme, yet not all women experiencing PCOS are susceptible to all of them.

According to tooba married participant:

"Mjy doctors ny btya ha k ma kabi maa ni ban skti pcos ki wja sy infertility ha, or mjy hairfall hota ha bht zyda, facial hair ha, or acne ka problem shadi sy phly be tha but proper ab check krwaya ha"

[Tooba said, my doctor told me that I couldn't conceive because of infertility caused by PCOS, I have a lot of hair fall problem, extra facial hair, and acne which I got before marriage but I took my proper treatment after marriage].

Lack of responsibility from practitioner side was also seen by few informants. The doctor did not actually mention the disease rather prescribe them the way getting out of it. According to Riza:

"my first OB Gyne told me I am just having hormonal imbalance but PCOS wasn't mention and she told me to use any available contraceptive pills in the market. As far as my first Ob gyne said, one cause for this is stress and yes I got a lot of stress in here"

It was also seen that not only obesity is one of symptom of PCOS rather unable to gain weight is also the sign. Saira was unmarried of age 22 told us:

"I basically have all the symptoms of PCOS. I am a lean patient of it and did not gain weight at over all, but I have abdominal fat, hirsutism, acne, irregular periods, anxiety a lot. PCOS causes anxiety in my mind without any reason I got sad. But I also lost my mother last year which may be the cause of it, And I have OCD as well".

One of the major causes of PCOS is craving for sweets and eating a lot of processed food and chickens. The respondent of age 25 year and unmarried elaborate the reasons of developing PCOS:

"I think the reason behind PCOS in my body is eating food that is not healthy, sweet food specially, and I really did not go for the exercise"

Sadaf was married of age 31 said:

"the reason I got behind PCOS is eating chicken a lot, as we have our own pottery farm and I loved eating process food which is one of its cause as per my doctor. I did not conceive till 7 year after marriage and got stressed a lot. Later on, I was diagnosed with PCOS and my gyne planned a diet for me which I have followed for one year and now I have my kid Alhumdulliah"

Kainat is unmarried of age 25 having bones issue, told us"

"mjy periods irregular rehty hain, hair fall, or sb sy bari problem bones ki ha mjy ku k meri bones mur gai ha hatho or paon ki ji ski wja sy ma sahi chal ni skti, us k ilwa acne. Meri doctor ny ultrasound kia tha mera jis ma pta chala tha k meri ovaries phool gai ha ji ski wja fast food or stress ha. Meri ami ko sugar ha or ye hmri khandani bemari ban chuki ha jo k ab muj ma b transfer ho gai ha"

[Kainat said, my periods are irregular having a lot of hair fall, and the major problem I have is my bones are curve around by which am unable to walk easily, and I have acne as well. My doctor did the ultrasound and told me that my ovaries are swelled up and major cause of is eating fast food and stress. My mom has diabetes and it is hereditary disease of our family which is now transferred to me as well].

4.2.1. Ovarian cysts and irregular period as leading symptom of PCOS

It is exciting for a researcher to look into the insights supplied by respondents on the key factors contributing to Polycystic (PCOS). In this environment, ovarian cysts and periods that are irregular appear as focus points. The prevalence of ovarian cysts as an underlying cause is consistent with medical literature, which states that the appearance of numerous cysts on the

ovaries is a defining feature of PCOS. The respondents' knowledge of this relationship demonstrates a level of public understanding concerning the disorder's physiological foundations. According to Riza, her 2016-19 periodic cycle has been taken during fieldwork as follows:

Figure 1:

Source-Fieldwork

It has seen that the cycle length has been recorded as of 77 days which is too large to compare with normal menstrual log. According to her reports, the average size of ovarian was also recorded as:

Figure 2:

EXAMINATION: TRANSVAGINAL ULTRASOUND

ULTRASOUND REPORT

The anteverted uterus is normal in size measuring 6.5 x 5.1 x 3.9 cm (L x W x AP) with homogenous parenchymal echopattern. The endometrial stripe is thickened measuring 0.9 cm. Cervix is intact.

The right ovary measures 3.0 x 2.7 x 2.4 cm (L x W x AP) with multiple cystic structures ranging from 0.5-0.8 cm diameter.

The left ovary measures 3.6 x 2.6 x 1.9 cm (L x W x AP) with multiple cystic structures ranging from 0.5-0.8 cm diameter.

No fluid is noted in the posterior cul de sac.

IMPRESSION: Polycystic ovaries, bilateral.

Source-Fieldwork

This association, as mentioned by those interviews, emphasizes the significance of monthly regularity in evaluating and controlling PCOS. A significant interval of roughly 77 days without periods and the development of ovarian cysts have been reported to frequently correspond with the diagnosis of PCOS. This finding is consistent with the medical criteria for identifying the condition.

Furthermore, the respondents' perception of the link between periods that are irregular and PCOS is consistent with clinical knowledge. Irregular menstrual periods are a common sign of PCOS, and they frequently indicate hormonal abnormalities. According to those inquired about, this association emphasizes the importance of monthly periodicity in assessing and controlling PCOS.

Another respondent who are diagnosed with PCOS shared the original report with researcher, as she was unaware of having cysts in her ovary.

Figure 3:

Summary of Findings

UTERUS It is anteverted in position The size of the uterus is as follows
LENGTH : 8.5cm
AP : 4.2 cm

The uterus is of normal in size

MYOMETRIUM: The myometrium is of homogeneous texture. No focal lesion is noted.

ENDOMETRIUM: The endometrium is 9.2 mm in thickness and of high echo.

TUBO-OVARIAN AREAS: A small sized cyst with homogeneous low level internal echoes measures 3.6 x 2.5 cm in size seen at the right adnexal region.

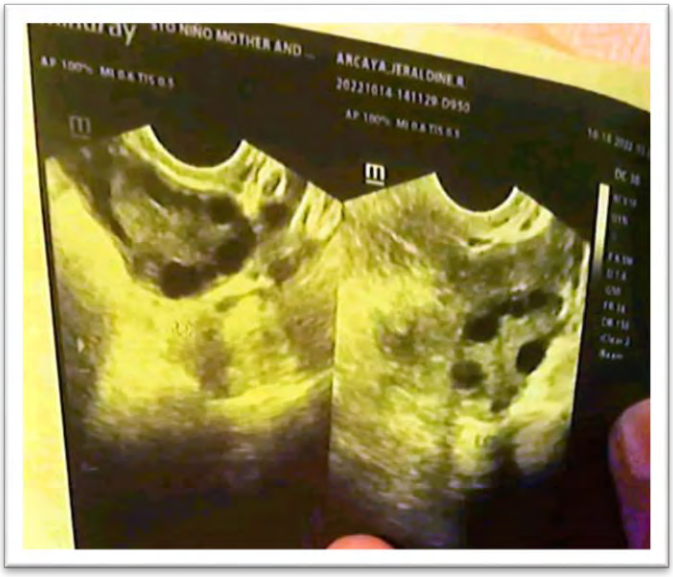
Day of cycle	Rt. ovary vol-31.6cc		Lt. ovary Vol-12.0cc		Any abnormality	Comment
10th	No. of follicle	Size of follicle(mm)	No. of follicle	Size of follicle(mm)	Right ovarian endometriotic cyst .	No prominent follicles are seen both ovaries .
	No prominent follicles is seen		No prominent follicles is seen other area 7.8 x 5.4 6.9 x 5.1			

CUL DE SAC
No free fluid is present.

Source-Fieldwork

Present report elaborates that right ovary has ovaries whereas; endometriotic cysts among respondent. Another respondent shared her Ultrasound report as:

Figure 4:

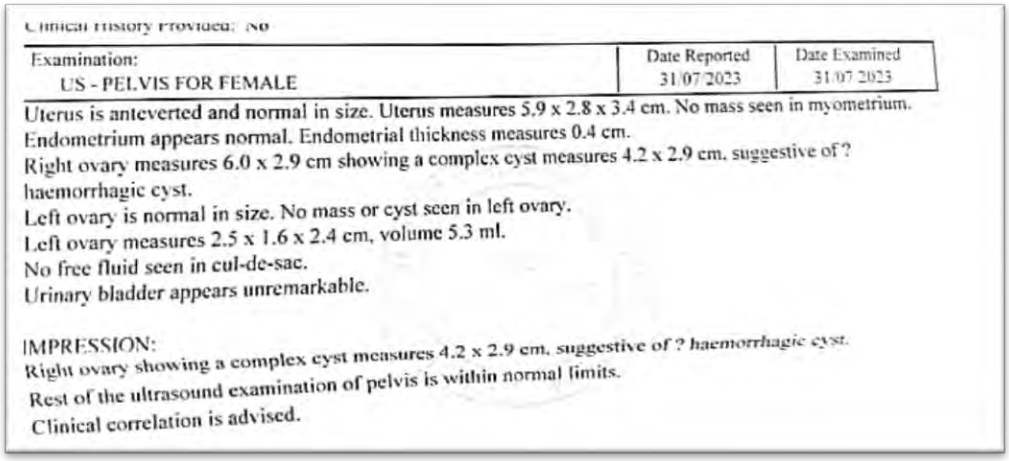


source-Fieldwork

The importance of ultrasound results suggesting cysts within the ovaries is highlighted by participants.it has been shown clearly that both ovaries has a variety of cyst present in patient

which confirm the signs of PCOS. This one-of-a-kind argument emphasizes the need of diagnostic methods in validating a diagnosis of PCOS. Another respondent share evidence of PCOS as:

Figure 5:



Clinical History Provided: No

Examination:	Date Reported	Date Examined
US - PELVIS FOR FEMALE	31/07/2023	31/07/2023

Uterus is anteverted and normal in size. Uterus measures 5.9 x 2.8 x 3.4 cm. No mass seen in myometrium.
Endometrium appears normal. Endometrial thickness measures 0.4 cm.
Right ovary measures 6.0 x 2.9 cm showing a complex cyst measures 4.2 x 2.9 cm, suggestive of ? haemorrhagic cyst.
Left ovary is normal in size. No mass or cyst seen in left ovary.
Left ovary measures 2.5 x 1.6 x 2.4 cm, volume 5.3 ml.
No free fluid seen in cul-de-sac.
Urinary bladder appears unremarkable.

IMPRESSION:
Right ovary showing a complex cyst measures 4.2 x 2.9 cm, suggestive of ? haemorrhagic cyst.
Rest of the ultrasound examination of pelvis is within normal limits.
Clinical correlation is advised.

Source-Fieldwork

The results of report show that left ovary is normal but right ovary have significant cysts with the size of 4.2*2.9, confirming hemorrhagic cysts. It is illuminating to see how responders make links between medical findings and their personal events or perceptions. Their recognition of cysts inside the ovaries and period inconsistencies as key causes of PCOS suggests an acquaintance with the disorder's defining features. This viewpoint emphasizes the importance of ongoing PCOS awareness initiatives and education in bridging the gap between medical knowledge and public comprehension.

4.3. Lack of awareness

Majority of patients are unaware of the syndrome and even the name of PCOS, most of the respondent get to know it when they experience the disease. As iman told us:

“no, I did not hear of this before I got it”

Mehwish said:

"mjy phly ni pta tha k PCOS kia hota ha mjy meri doctor ny btya tha k pani ki theliya[2] *ha jis ko doctors PCOS kahty ha ye ak bemari ha jis ka koi permanent ilaj b ni ha. Mery khayl ma aurto ko apna check-up krwaty rehna chaeay ku k in ka ni pta hota jesy mjy elam nit ha "*

[Mahwish said, I wasn't aware of this disease, my doctor told me that I have water sac which is called PCOS and there is no permanent treatment of it. I think women should have there check up because such diseases are so sudden and usually, they are unaware of it].

The need for correct information is a need of time because of vast spread of the syndrome among female especially among unmarried girls. Another respondent said,

"I am the only girl of my house and my mother is uneducated, when I got this disease, I was unaware of it totally and my weight was uncontrollable. It reaches nearly 16o kg. fortunately, I met someone in my university and told her that I got such symptoms that my weight is uncontrollable, a lot of facial hair, acne, irregular periods, she told me maybe it is PCOS and then I search my own symptoms and found her correct".

Based on study findings, many women with PCOS believe they do not receive adequate information about their disease and are dissatisfied by healthcare practitioners' lack of expertise regarding PCOS. As a result, if patients are unclear concerning their evaluation or therapy plan, they should ask concerns and seek clarification.

4.4. Psychological experiences of PCOS

The majority of the participating females (90%) blamed hirsutism, alopecia, and acne for their loss of physical beauty. They said that these symptoms were the primary reasons of their anxiety, unhappiness, and low self-confidence. The consequences of PCOS either biological and socio-psychological are seen **Table 2** as:

Table 2

Biological/ physical Consequences	**Social-psychological Consequences**
Acne	Stigmatization and social criticism
Overweight	Social isolation
Infertility	Fear of husband second marriage

[2] Pani ki theliya: the water sac term used for cysts by practitioners.

Irregular periods	Fear of ill-health
Stress, anxiety, depression	Body image
Hirsutism	Fear of infertility
Enlarge ovaries with numerous small cysts / pelvic pain	Fear of getting married among adolscents

Nimra said:

"Hirsutism saddens me because it affects my appearance." I seek for a suitable moment to begin laser treatment. But I'm trying not to look in the mirror right now!" (Nimra unmarried participant).

Nida married for 12 year said:

"ma bht pryshan rehti hu ku k 12 sal sy olad ni ha meri, aksr apny meya k samny roti hu k kisi sy elaj krwa den mera, par koi peer hakeem ni chory hum ny elaj k leay. Mjy bht zyda rona ata ha belwaja or aksr ghussa ho jati hu achank ji spy mjy sharminda hona prhta ha bad ma par koi meri situation ko ni smj rha"

[Nida said, I am so worried that I didn't conceive still after 12 years of marriage. Sometime I cried Infront of my husband for the treatment and we did not miss any hakeem and peer[3] for treatment of it. I cried so hard sometimes without any reason and sometime I got frustrated suddenly which is embarrassing for me as well, but no one understand my situation].

She speaks about breaking down in front of her partner and seeking help from a variety of sources like hakeems and peers. She also remembers sobbing for no apparent reason and being irritated unexpectedly, which is unpleasant for her, however nobody seems to grasp her predicament. According to the search results, infertility can cause severe emotional discomfort, anxiety, and sadness in both spouses. Therefore, need for healthcare provider at right time is necessary in this situation.

Major side effect of PCOS is reported among participants is feeling anxiety, depression due to delayed periods or sometime missed also. Riza said:

[3] Hakeen and peer: the local practitioner in fieldwork uses herbal medicines, whereas peer uses religious way for treatment.

“yes, very much! I’m very much worried that why I kept tracking it. I think PCOS and anxiety are co related... I mean have anxiety disorder too”

Tyabba is unmarried of age 25 said:

“doctor ny mjy thyroid test ka bola ha ku k mjy PCOS diagnose hua tha or ab thyroid ka b issue lag rha ha mjy, is ki wja sy bht stress hota ha mjy or tension ma zyda khati hu ma to weight gain hota ha”

[Tyabba said: doctor ask me to test for thyroid and I have diagnosed with PCOS as well now thyroid is another issue, due to this I have stress a lot and I eat a lot in tension which results in weight gain].

Another married participant having infertility issue with PCOS said:

“I faced a lot of stress, depression, mental illness and sometimes am unable to pay attention to my work because of stress that how do I become a mom one day or maybe I cannot conceive for my whole life”

The females who took part indicated discontent with their weight, with obesity being one of their top worries. They believed that their current look had rendered them extremely unattractive and silly. Their major causes for these sentiments were boredom in doing everyday activities, difficulty to participate in sports activities, improper appearance, seeming older than their real age, limitations in picking appropriate clothing, and a lack of feminine delicacy. They had some negative sentiments and felt humiliated, useless, and despised. Saira said:

"When I go to buy clothes, the salesman brings me several options, but neither of them fit." "I'm very embarrassed, and it makes me sad."

The majority of the females who took part expressed concern about the effects of hormonal medications (such as oral contraceptives) on their fertility. They anticipated that they might be infertile in the future. Mishal tayyab expresses:

"I wonder what these medications (oral contraceptive tablets[4]) are doing to me." Because I've heard that these medicines induce infertility. I dislike drugs and am concerned anytime I use them!” she continued:

[4] Oral contraceptive pills: The birth control pills used to treat PCOS are combination hormonal birth control tablets, which include both estrogen and progestin. Female hormones in contraception tablets may aid in the regulation of menstrual bleeding. The tablets may

"There was like 15 days gap in my periods but with diet I got better, and I had regular periods but then again I started to gain weight as I am stress eater, recent scan of ovary has alo come worse and along with it I have a gap of 6-9 days now"

Almost all of the women in the study (99%) reported that having abnormally long menstrual cycles was a source of stress that negatively impacted their daily lives and made them anxious and irritable. "Irregular periods are so embarrassing; on the one hand, I'm constantly worried about the delay, but on the other hand, it wrecks all my plans," said one participant.The lack of communication among parents and lack of awareness is also seen as one of the causes of stress and increases the hormonal irregularities. Nimra said:

"I was 160 kg when I firstly diagnose with PCOS

my parents especially mother act so weird like I am unmarried why I am supposed to get hormonal diseases and my mother said "ye to jan buj k weight kam ni krti or bhany dhoond rhi ha bethy bethy dawaio sy kam ho jay wazan" So it was difficult for me to bear such things and solely I teach them and get them know about PCOS. I got stress at one time and feeling disappointed that I also got migraine"

4.5. Diet patterns: Nourishing strategies

Although media publications emphasise eating habits, junk food intake, and sedentary lives, lay informants ranked stress as the most important concern. Most cited poor diet and physical activity habits as a result of the demands and time restrictions of city living, with a concentration on food that was not prepared at home. The ratio of eating disorders mostly seen among unmarried girls. Lubna is a single girl of age 26, she teaches to the secondary classes said:

"I am living in a nuclear family and I ate 3x meal a day which is mostly the processed food at one time and sometime I skip my breakfast"

Research finding shows, skipping breakfast and depending on processed foods can have negative effects on dietary intake, the metabolism, cognitive function, and general health.

Another respondent said:

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also aid in the reduction of excess growing hair and acne. Furthermore, the tablets may reduce the incidence of endometrial cancer.

"In the end, we eat junk food." Bread was not even considered a food by our grandmothers and moms. There was always roti[5]. We just want bread for breakfast now. We don't have time to cook rotis"

It was mentioned by the researcher that; leaving behind the nutritional full food i.e. roti, the young generation preferred processed food and bread in early morning, due to the lack to time. Respondent believes that eating processed meals contributes to PCOS. University going student are also one of the major victims of PCOS because of mis diets and eating a lot of junk food. As sara explain:

"I eat twice a day, mostly pasta lover and sometime I drink shake during free time in university. My timings of eating are so mismatch that I just eat breakfast and dinner at home"

Sara's food choices, as mentioned in the following statement, might have an effect on how well she is doing. meal twice a day, usually spaghetti, and occasionally sipping a shake during leisure time during university, in addition to mismatched meal timings, might have a severe impact on health. Fermented foods, such as pasta and drinks, sometimes lose micronutrients during processing, and producers may add minerals and vitamins to compensate.

A 20-year-old girl says:

"my diet is not very good but I will soon work on it. I have high intake of junk food and my PCOS has insulin resistance so I feel crave for sweet food"

Mishal Tayyab who is also single girl of age 22 said:

"sweet any kind of sweet is my favourite, I crave a lot for Metha[6]. I took meal three times a day but I snack at late night. I woke up to eat something in middle of night"

Girls who took part discussed the importance of peers as well as friends in fast food intake. They found it fun to consume junk food with others of their age. A 19-year-old girl said:

"I enjoy eating fast foods with my buddies. We consume fast food whenever we go out."

The majority of the participating females stated that they dislike eating vegetables and fruits owing to their unpleasant taste. They stated that they exclusively eat fruits and vegetables due to familial pressure. Iman state:

[5] Roti: flatted bread made of pure wheat
[6] Metha: sweet food

"I only consume fruits and vegetables because my mother makes me!”.

Another respondent said:

"I don't like dairy products, but I do eat yoghurt on occasion." I can't drink milk because I hate the flavour." (20-year-old female).

Respondent, who dislikes dairy products, occasionally consumes yoghurt. Lactose-intolerant people can accept yoghurt since the lactose gets broken off during manufacture and the living cultures help in digestion.

4.6. Body image and Lack of Physical Attractiveness in Oneself

The medical implications of psychological issues, the psychological components of the aetiology of PCOS, and the provision of care all hinge on a recognition of body image, which is vital for characterising the sociocultural and psychological consequences of having PCOS. Polycystic ovary syndrome has been linked to low body confidence and low body image in women. People's perceptions of their bodies change dramatically as they become older. Younger women (those under 25) have a more harder time being happy with their appearance. Moreira, Soares, Tomaz, Azevedo, & Maranhao (2010) found that women of medium weight had a negative body image because of the cultural idealisation of thinness.

Mishal Tayyab, age 22, proved that: "um well!" Since I was a little girl, my parents, other relatives, and even some of my classmates have made fun of my appearance.People who suffer from benign gynaecological problems (BGCs) have voiced concern that the negative impacts of their disease have permeated their entire sense of self, making it difficult to have a positive relationship with their physical being. A commenter explained, "PCOS is typically thought of as affecting the reproductive system, but it affects my entire body." It's as if tentacles are smothering you from every angle. Each time it takes hold of me, I feel more broken and depressed than the last. My physical self is foreign to me now, and fighting it seems futile.The effects of teasing on a person's mental health can be subtle but significant, and it has been shown that body image and obesity are interesting topics in our families. iman claims, "I felt ashamed of my weight when it hit 70 or more. I'll never forget what my mum said me: "Tum is umer ma itni moti ho haq ki umer ma jao gi to phat jao gi." Haq, who is now 35 years old, was essentially his son. My body image and social status have been negatively impacted by PCOS. "As I told you before, my weight is 70+, and I don't think I'm in my healthy BMI," she said, "but the alterations in my body make me feel depressed, miserable, overthinker."

Female artist Javeria (26 years old) also conveyed her thoughts on the opinions of others through a sketch she made of a group of people gazing on.

The people in my life don't treat it like a mental illness, even if they should. Fat women, in their minds, are the ones who are too proud to acknowledge their condition, always finding an out. Seeing the pain on their faces is devastating.

Participants' greatest source of stress was their own family's lack of PCOS knowledge and acceptance. This is what nimra had to say about her weight: "I'm about 160 kilos, and my folks think I'm making excuses for not dropping it. Why don't I just want to put on those 50 extra pounds? I joined a gym to achieve this goal, and now I have a plethora of unwanted physical effects, like increased swelling, accelerated hair loss, and acne.

Since their bodies did not conform to the western ideal, many women just refused to accept themselves. The inability to accept one's weight can have a devastating effect on one's self-esteem. Maria, age 31, married, childless, and yet 70 kg, says, "a thin frame is preferable in our culture" and "men like slimmer women more." My hubby is constantly making fun of me for my weight and how I appear. However, he is aware that I have PCOS and that I cannot change the situation.

The study found that most women with the syndrome believed they were ugly and felt shame and humiliation as a result of their physical symptoms, which included obesity, hirsutism, hair loss, and acne. One unhappy married woman, age 29, said, "I'm unhappy with my look because I am unable to put on the clothes, I like to blame my obesity; and I'm shame when I wanna go to a party or a ceremony."

Obesity-related body dissatisfaction has been found to have a significant impact on both self-esteem and body image. This unhappiness can lead to embarrassment and shame, especially at formal events like weddings and receptions. For body image problems associated with obesity, a multifaceted strategy is required. This may entail promoting an ideal body image and self-acceptance, challenging conventional ideas of beauty, and supporting a well-rounded approach to diet and exercise.

4.7. Stigmatization

Despite coming out of the shadows, stigma is still a major problem in the international response to chronic conditions like polycystic ovarian syndrome. Due of its association with menstruation, PCOS is stigmatised in traditional Pakistani culture. Because they fear being made fun of, girls often don't talk about their periods with anybody outside of their partners. There is a social stigma towards menstruation women and the disorders associated with it (Sharmaa & Mishra, 2018). Why women don't talk about menstruation: socioreligious factors, according to respondents. An administrator at a public hospital and one of the respondents said, "We come from middle-class families, and our middle-class morals prevent us from addressing such matters openly."

Women are socially constructed to feel incomplete if they are unable to become mothers. Tooba's doctor diagnosed her with PCOS and significant infertility after she married a year ago. She said the doctor, "doctor, please diagnose me with PCOS; otherwise, I would have to ask my mother to get me a hysterectomy because my problem is becoming worse by the day. For example, "Mjy lagta tha k miss ho jaty ha periods aksr girls ko to ma ny is bat ko lite kia, or ab ye bat mery husband ko pta ha srf....in-laws sy abi zikr ni kia hum treatment krwa rhy ha is ka."

[To quote Tooba: My doctor diagnosed me with PCOS and told me I would never get pregnant because my fertility issues date back to before I got married. Because I assumed that it was common for women to miss their periods occasionally, I handled the situation rather casually.We have not brought this up with the in-laws and are handling it accordingly.

The inability of a woman to have children is a social construct that originates within her immediate social circle. Harassment from in-laws and society occurs when a woman does not fulfil her socially expected duty as a mother, which is directly related to the needs of her children. Three years after her marriage, Maria still hasn't been able to conceive. "My husband was normal in his reaction, but I have faced a harsh reaction from my mother-in-law, as he was the only son to run his father's generation and if I am unable to conceive, then he might leave me," she explained. She put a lot of pressure on me to have children, so I never felt like I had a choice.

Almost all PCOS-affected married women shared stories about the social and psychological hardship of infertility. Another recent bride who has had sporadic periods ever since she first started menstruating remarked, "I didn't tell my mother-in-law about my sporadic periods before we married." Otherwise, she'd attack me and say things like, "Your son married a sick woman."

Young girls go through primary socialisation, which involves the instillation of ideas and views about menstruation. Mothers instill in their daughters a strict policy of not discussing any aspect of their genitalia. When it comes to reproductive development, early adolescent girls may also benefit from primary socialisation from their peers. "due to overweight my parents were not taking the issue seriously, I am the only girl of the family and the mother is unemployed, when I got this condition, I was not conscious of it totally and my weight was uncontrollable," said Nimra, one of the respondents who self-diagnosed with PCOS and said that her friend was a major guider for her because she told her about PCOS and what symptoms she was facing. Almost 160 kilogrammes in total mass. My weight is out of control, I have a lot of facial hair, acne, and irregular periods; a friend at university suggested PCOS; after researching my own symptoms, I confirmed her suspicion.

Women are often left feeling unfinished on a personal level in addition to being victims of society's lack of completion. Women's preexisting social images are reinforced by the inculcation of stereotypical gender roles and expectations. Open discussion of a woman's sexuality and reproductive process is still frowned upon, no matter how progressive and modern our culture may be. Girls and women in Pakistan are socialised in such a way that not even their mothers are allowed to ask them about menstruation or other bodily changes. The latest study has the potential to show a new side of this disease to the rest of the world.

4.8. Fear for getting married among adolescents

Because of their infertility, women with PCOS not only face the fear of the disease's clinical effects and long-term medical complications, but also have their "womanhood" fundamentally altered by feelings of physical unattractiveness and the shame of a potential "deviation" from proper femininity. Physical and mental changes (hirsutism, being overweight, acne, and alopecia) and a lack of sexual hormones have a negative impact on PCOS women's sexual roles, often disrupting their intimate functions by destroying their feelings of worth and feminine identity (Amiri, Tehrani, Simbar, Thamtan, & Shiva, 2014). A study published in the peer-reviewed International Journal of Psychosomatic Obstetricians and Gynaecology found that PCOS was associated with increased levels of sadness and anxiety in women. Researchers found a correlation between these symptoms and a reduced desire to get married (Damone, Joham, Loxton, Earnest, & Teede, 2019). The reason Mishal Tayyab says "yes" is not PCOS itself, but rather her weight and erratic emotions. How many good and terrible days there are in my life. Having PCOS and delaying marriage has not made me feel any different from anyone else. Even though my sister's in-laws were incredibly supportive of her PCOS diagnosis when she got married recently, I can't help but worry about my own in-laws.

This data suggests that overweight women experience feelings of embarrassment and shame due to their appearances when interacting with others. There's also the issue of whether or not her future in-laws will understand her disease.The burden of this stigma can add emotional and mental stress.Unmarried women also showed significant anxiety about keeping their PCOS secret from their future in-laws. It's crucial to be upfront and honest with future in-laws about PCOS and its effects on fertility and overall health. Education and awareness of PCOS can help reduce prejudice and boost acceptance.

Worries about infertility or being able to sustain a pregnancy may also discourage a woman with PCOS from tying the knot. While discussing the fertility problems of his friends, Tyabba remarked, "mujhy bht zyda dar lagta ha shadi sy meri friend ko peridos ni hoty thy sahi but us k 2 babies hain or meri bhabi ko koi issue ni esa PCOS ya koi or but still un k bach Allah ki dyn ha yea"

[I am so terrified of getting married, yet one of my friends had irregular periods but still had two children, and another of my cousins is completely healthy and has never experienced any symptoms of PCOS, so I have to believe that this is all a blessing from ALLAH.]

Acne, increased hair growth, and obesity are among physical indicators of polycystic ovary syndrome that can affect a woman's confidence in herself and her ability to find and keep a romantic relationship. These symptoms may have an emotional impact, such as lowering one's desire to be married or increasing one's fear of rejection. Javeria, a 26-year-old single woman, shared her fears about getting married and having children, citing her weight and the abundance of hair on her body as examples.

Keep in mind that PCOS and the fear of marriage may be seen differently depending on cultural, religious, or societal conventions. Therefore, it is essential to investigate the cultural perspective on PCOS and marriage, taking into account the aforementioned factors. Iman said, "Yes, there are times when I get scared; once my sister-in-law confided in another that she was unable to conceive because of her period problems." Ours is a culture that looks for faults in others and uses them as a weapon. So, that's how my family history goes. My mother is so worried that this may cause difficulties in my "Rishta" that she doesn't even want me to notify my sister-in-law. That's why she warned me not to tell my sister-in-law about this.

When asked about the stress of trying to conceive, Sara, a 23-year-old woman, responded, "han stress ha agr mjy mushkil hui conceive krny ma aur society ka pressure." The phrase "kesy handle kru gi"

[yeah, I have worried that if I have trouble getting pregnant, I won't be able to bear the cultural pressure]

Some responders expressed a lack of fear and offered alternative viewpoints. Saira Murtaza, a 20-year-old patient, stated, "I guess all the patients who are unmarried had this fear because rumours regarding PCOS of not conceiving, but actually I saw so many girls conceive successfully with PCOS."

However, it is evident that women with PCOS face unique challenges as a result of societal stigma and discrimination, which may contribute to their fear of marriage. To be clear, not all women with PCOS experience marriage-related anxiety or apprehension. A psychologist or counsellor may be able to help those experiencing these symptoms by providing guidance and tools for coping.

Family strength and economic hardships

Scholarly works in medical and biocultural anthropology (such as Baer, 1996; Dressler et al., 2005; Farmer, 1999; Lock & Kaufert, 2001) have long acknowledged that the body integrates the social and material world into its biology. A person (or group) cannot be comprehended in isolation from their historical and social contexts, which are reflected in their physical appearance. Those who took part in the study said things like, "Urban middle-class women represent the demographic most likely to be impacted by PCOS" (Pathak & Nichter, Polycystic ovary syndrome in globalising India: An ecosocial perspective on an emerging lifestyle disease, 2015), adding fuel to a health debate by laying the blame for it on urbanisation and middle-class lifestyles.

Treatment for this syndrome is costly for both upper- and lower-middle-class urban households, and the results reveal that respondents in both socioeconomic groups encounter difficulties. One of the factors that helps respondents deal with stress, anger, sadness, and other mental health issues is the support they receive from their families and husbands. Unfortunately, some respondents have financial difficulties due to a lack of resources (such as adequate treatment funds or adequate facilities). Riza, a 32-year-old married teacher, reflected, "It was difficult for us, but fortunately I have a good support system." My family and I have been frequenting medical facilities for a variety of reasons, making the addition of a third child feel nearly routine, if challenging. My husband is paying for my medical care, and all we want is to start a family.

Working women have additional societal burdens on top of the ones they already shoulder, such as meeting existing tasks and overcoming new obstacles in the workplace. The 26-year-old single instructor Lubna added, "In terms of financial support, it was just me." Knowing that they can't count on me only adds to their stress.

According to the respondent, abandoning PCOS because to lack of knowledge and financial pressure is common. Tyabba explained, "My mother responded, 'Ye khud he thek ho jay ga is k leay elaj ki zarort ni ha,' which means that our family is having financial difficulties.

26-year-old Javeria, who lives with her father and is still single, admitted, "This is the one biggest mistake that I have done and I always had this guilt and I couldn't ask my parents, but yeah, they didn't have any financial problem." My hesitation and fear prevented me from getting it checked for a very long time. One possible explanation is ignorance.

The participant indicated that married women with PCOS and reproductive issues face additional societal pressure beyond financial hardship, in the form of disillusionment and rejection from in-laws. Mehwish, the mother of three children, has said, "I find myself facing a lot of financial pressure because my father is no longer with us and my in-laws' father and mother are also not alive." Her children all suffer from numerous cysts, which causes their menstrual cycles to continue even when they are not pregnant. My mum is so naive that she had no idea what these illnesses were. My husband alone is responsible for covering the cost of my medical care. It was hard for me to ask for financial assistance because I knew it was a burden for him.

The researchers examined data on the costs of medical care and 29 previously published articles to estimate the economic impact of polycystic ovary syndrome. According to a prior study, by 2020, it will cost around $3.7 billion annually to identify and manage common reproductive disorders related with PCOS (Washington, 2021). Increases in both PCOS and the inflation rate in Pakistan indicate growing financial and emotional strain on the population as a whole.

4.10 family perception

Some basic objectives and discussion that was addressed in round 1with Nabeela's mother and Abida's[7] mother is here:

Diagnosis and Awareness:

- Exploring the emotional response to a PCOS diagnosis for unmarried girl and assessing the level of familiarity with PCOS prior to the diagnosis. It was important to diagnose the familiarity with syndrome being a mother of PCOS patients and how much they know about it.

Participant 1Nabeela mother:

"*When my daughter was diagnosed with PCOS, I experienced a range of emotions, including anxiety, fear, and perplexity. I hadn't heard of PCOS before, but it wasn't until my kid was diagnosed that I realized how serious it was. It was an educational experience for both of us".*

Participant 2 Abida mother:

[7] Nabeela and Abida: pseudonyms were used in FGD

"*I can relate to the worry and confusion that the other mothers mentioned. I had some awareness of PCOS, but I didn't fully understand its complexities and how it could affect my daughter's life until the diagnosis. It was a challenging time for both of us."*

- Investigating first worries about how PCOS may impact the child's socio-psychological health, particularly emotional and social elements. Understanding these issues is crucial because it may give insights into the mental and social problems that persons have when coping with PCOS, as well as assist identify possible areas for intervention and assistance to improve their overall well-being.

Participant 1:

"My initial concerns were on my daughter's socio-psychological health. I worried about how her confidence and sense of self-worth might be affected by PCOS. I was concerned that physical signs like weight gain and acne might cause her feel embarrassed and interfere with her connections with others."

Participant 2:

"I had similar reservations. I was concerned about her self-image and the way it would damage her relationships. Because PCOS symptoms may be noticeable and difficult to manage, I felt worried as to how she would deal with social settings and make relationships with people."

These are real worries, and it's reasonable that mothers were concerned about their children's socio-psychological well-being. PCOS can have an effect on one's confidence, body image, and interactions. It is critical that we assist and reassure our children when they face these problems.

Psychological Impact:

- Investigating the experiences of participants, that how PCOS impacted their daughter's psychological well-being and mental wellness in their personal experiences.

Participant 1:

"My *daughter's mental health has suffered as a result of PCOS. She has had mood swings, moments of anxiousness, and occasional emotions of irritation or despair. Her feelings of self-worth and body image have suffered as a result of the difficulties connected with treating PCOS symptoms like weight gain and acne. However, with the help of healthcare experts and our*

family, she became able to push through these challenges and build coping skills to preserve her mental health."

Participant 2:

"I've seen that PCOS has had an effect on my daughter's psychological health as well. The hormonal abnormalities and physical symptoms of PCOS have left her disappointed and anxious at times. It has also caused uncertainty and fear about her future, particularly regarding fertility and the formation of intimate connections. She has, however, sought professional care while discovering support in online forums, which has helped her manage her mental health and provide a feeling of sympathy and connection."

This goal is to develop a thorough knowledge of the complicated interaction between PCOS and mental wellbeing, shining light on possible areas where support and treatments may be useful for PCOS patients.

- Secondly, examining whether her experience with PCOS has shown any special psychological concerns and obtaining clarification on any potential issues.

Participant 1:

"Yes, I've seen some unusual psychological challenges that my kid has had because an outcome of PCOS. One of the most noticeable difficulties is the influence on her appearance and sense of self-worth. Symptoms of PCOS such as weight increase, facial hair development, or acne can all have a negative impact on how she views herself and her general self-esteem. It took her some time to embrace her figure and create a healthy self-image.

In addition, my daughter has experienced feelings of anger and despair as a result of reproductive difficulties. The uncertainty over her ability to produce babies in the near future has caused her considerable turmoil. It needed her to work through her feelings and accept different pathways to parenting, if necessary."

Participant 2:

"Due to PCOS, my child has also mentioned feelings of loneliness or being apart from her peers. This sense that she's "not normal" has harmed her self-esteem and social relationships at times. Connecting to other people who share her experiences, either through peer support networks or online forums, has been critical for her".

PCOS may clearly cause distinct psychological obstacles for female, such as body image issues, fertility-related discomfort, anxiety, and feelings of isolation. Providing a friendly and understanding atmosphere, as well as access to professional treatment and community resources, may be extremely beneficial in assisting them in navigating these psychological challenges.

Body Image & Self-Esteem:

- Assessing if particular occurrences or scenarios have harmed the girl's body image or self-esteem, and obtaining a full explanation of these potential incidences.

Participant 1

"reports negative incidents impacting her daughter's body image and self-esteem. She experiences embarrassment and self-consciousness when noticing weight increase or acne outbreaks at social events. External comments and judgments, such as friends discussing weight or cultural pressure, further erode her self-esteem."

Participant 2:

"similarly, my kid has been exposed to events that have had a negative impact on her body image and self-esteem. One example is when she gets unwanted advice or inappropriate comments about her weight or looks from others. Such comments can be unpleasant and encourage negative self-perception, causing her self-esteem to plummet. Furthermore, the pervasiveness of social media might have a detrimental impact on her self-image. Comparing herself to supposedly "perfect" or filtered photographs on the internet might lead to unreasonable expectations and feelings of inadequacy. She must actively regulate her social media intake and concentrate on self-acceptance".

It's distressing to read about how remarks, contrasts, and societal pressures may have a detrimental impact on our girls' body image and self-esteem. As moms, it is critical that we establish a supportive atmosphere, encourage self-acceptance, and reinforce good body image messaging. Encourage them to priorities their entire well-being over social beauty standards to build an optimal level of self-esteem.

Interventions and coping strategies:

- Exploring the strategies participants and their child have employed to address the socio-psychological challenges posed by PCOS.

Participant 1:

"I *was uninformed of her condition for three to four years, and she dealt with it on her own, however once I became aware, my daughter and I have attempted many techniques to addressing the socio-psychological challenges linked with PCOS. We've prioritized open communication, making sure she's at ease voicing her thoughts and worries. We were able to better comprehend her experiences and give emotional assistance as a result of this.*

We've also sought professional support, such as allopathic treatment, therapy or counselling, to help her deal with the emotional issues that come with PCOS. Therapy has helped her develop coping skills, build resilience, and boost her self-esteem."

Participant 2:

"As with Participant 1, honest interaction has been critical in treating PCOS-related socio-psychological difficulties. My daughter and I were having open and honest discussions about her emotions, anxieties, and concerns. We were able to acknowledge her emotions and give assistance by providing a secure and non-judgmental environment.

We've also talked about self-care practices. This includes things such as participating in hobbies (she asked me if she could take her CSS test, which she did even though she didn't pass), exercising meditation and self-compassion, and prioritizing her general well-being."

In coping with the socio-psychological aspects of PCOS. It is clear that honest discourse, professional assistance, self-care practices, and community support have all played important roles in resolving these difficulties. We can help our daughters manage the socio-psychological effects of PCOS by taking a comprehensive approach.

Prospects for the Future

Examining excited and anxieties surrounding participant daughter's future, especially the socio-psychological obstacles linked with PCOS, and pursuing an in-depth clarification on these fears and expectations.

Participant 1:

"Regarding all of the socio-psychological issues associated with PCOS, my hopes for my daughter's future revolve around her capacity to build resilience, self-acceptance, and optimism. I hope she continues to develop appropriate coping techniques and a solid support

structure to help her manage any obstacles that may occur. Despite the socio-psychological hurdles, I believe she will be able to live a full life, pursuing her goals and dreams.

However, I possess some concerns. I'm concerned about the long-term effects of PCOS on her psychological well-being and relationships. I am concerned that she will experience extra obstacles connected to fertility or difficulties in building romantic relationships. Nonetheless, I make every effort to provide her with as much emotional and practical assistance as possible."

Participant 2:

"Regardless of the hurdles she may face, I expect her to achieve pleasure and fulfilment in both her professional and personal lives. However, I am concerned about her long-term well-being. I'm concerned about PCOS's possible influence upon her mental health, connections, and general quality of life. Because of social beliefs regarding PCOS, I am concerned that daughter will suffer prejudice, judgement, or limited options."

Given the potential for difficulties, it's understandable to be concerned. We can assist them manage these hurdles and enable them to have happy lives by giving support, encouraging resilience, and campaigning for awareness.

4.10.2. married female and their mother in laws

In round 2, we did our session of FGD with mother in-laws of our married participants. So, we chose Sadaf[8] mother as participant 1 who have one kid after 7 years of her marriage, and ayat Fatima mother as participant 2, who did not conceive until her 4 years of married. Some of the objective and discussion are given below:

Investigating the manner in which participant have offered emotional and practical assistance to the daughter-in-law while she navigates the problems of PCOS-related infertility.

Participant 1 Sadaf mother in-law:

"As a mother-in-law, I make it a point to emotionally and practically assist my daughter-in-law in her journey with PCOS-related infertility. Emotionally, I provide her a listening ear as well as a secure area in which she may vent her thoughts and frustrations. I strive to be empathic, kind, and non-judgmental, enabling her to express her emotions without fear of being

[8] Sadaf and Ayat: pseudonyms were used in FGD

judged. In practise, I've assisted her in navigating the healthcare system, accompanied her to doctor's visits and providing transportation when necessary."

Participant 2 Ayat mother in-law:

"I must own that I wasn't as helpful as I might have been. I first struggled to comprehend the emotional toll that PCOS-related infertility was putting on my daughter-in-law. Instead of giving support, I unwittingly increased her anxiety by asking about her pregnancy and made rude comments. In retrospect, I realise that I lacked compassion and failed to recognise the difficulties she was experiencing. I now recognise the value of offering emotional support as well as being a source of courage during difficult times."

It takes courage to acknowledge our past shortcomings and strive to improve. Recognizing the need for emotional support and actively educating ourselves about PCOS can make a significant difference in supporting our daughters-in-law in their journey with PCOS-related infertility. By fostering understanding and empathy, we can create a more supportive environment for them.

Examining the misunderstandings or pressures of society participant observed about PCOS-related infertility, as well as the tactics participant used to confront and fight these myths within your circle of relatives and social groups.

Participant 1*:*

"I've noticed a rising understanding and acceptance of PCOS-related problems as a medical disease rather than a personal failing. Society are becoming more aware and supportive of PCOS, which is a complicated hormonal illness that can interfere with fertility. Within my family and social networks, I have used the opportunity to clarify myths regarding PCOS and its influence on fertility, developing a more caring and empathic approach towards women with PCOS-related infertility."

Participant2:

"*One common myth is that PCOS-related infertility is completely the woman's responsibility or the result of her activities. This misunderstanding might lead to the woman being blamed and shamed, creating more mental suffering. It is critical to dispel this myth and inform others about the complexities of PCOS and infertility. I've made an effort to dispel these myths among*

my family and social networks by giving real facts regarding PCOS, its influence on fertility, & the value of empathy and support instead of judgement."

It is crucial to address and challenge the negative misconceptions while promoting awareness and acceptance within our families and social circles. By sharing accurate information and fostering understanding, we can help create a more supportive environment for women dealing with PCOS-related infertility.

Examining the different ways by which participant, as mothers-in-law, may help to create a supportive and empathic environment for their daughter-in-law. This includes thinking about the psychological and emotional issues that she could face as a result of PCOS-related infertility.

Participant 1:

We may play an important role as mothers-in-law in creating a nurturing and compassionate atmosphere for our daughters-in-law. To begin, we may educate ourselves on PCOS and its influence on fertility. This understanding will allow us to have educated dialogues, ask empathic questions, and give correct knowledge and assets when they are required. Second, we may actively listen to our daughter-in-law's worries and sentiments without passing judgement, providing her with a safe environment to express herself.

Participant 2:

Unfortunately, I must acknowledge that I have not always been as encouraging as I could have been. I lacked understanding and empathy for the emotional and psychological difficulties my daughter-in-law was experiencing as a result of PCOS-related infertility. I unwittingly added to her tension by making rude remarks or ignoring her sentiments. Moving forward, I see the necessity of carefully listening to her, providing non-judgmental support, and educating myself on PCOS-related infertility.

Investigating any help or professional assistance participant have personally sought or recommended to their spouse's daughter to assist her in successfully handling the problems of PCOS-related infertility, including both emotional and practical elements.

Participant 1:

I advised my daughter-in-law to seek expert help from a fertility doctor or reproductive endocrinologist. These professionals can give medical advice, discuss treatment choices such

as fertility treatments, and provide emotional support during the procedure. and now you see I became a grandmother after 7 years and blessed with a grandbaby boy who run our generation.

Participant 2:

I took the initiative to explore and share information on local support groups or fertility assistance organisations to my daughter-in-law. These groups frequently have educated facilitators who can help women through the issues of PCOS-related infertility while also providing a supportive environment. I also suggested she see a nutritionist or dietician who specialises in PCOS to assist manage her symptoms and improve her general health. I also recommended her to check with Peer because there are many girls who have had children with Allah's grace.

Seeking help from fertility specialists, therapists, support groups, and other professionals can provide valuable guidance, emotional support, and a sense of community. It is important to explore various avenues to find the support and resources that best suit her needs.

Investigating the techniques participant employed to communicate with their son, who serves as the afflicted woman's spouse. The goal is to ensure that he provides support, compassion, and empathy for his wife's PCOS-related infertility issues.

Participant 1:

I've had open and honest chats with my son regarding the difficulties his wife is experiencing as a result of PCOS-related infertility. Throughout this difficult road, I have emphasised the value of empathy, understanding, and support. I've pushed him to pay attention to his wife, validate her emotions, and be her rock. I've also given him educational materials to assist him with understanding PCOS and infertility so he can be more educated and supportive. We can guarantee that he remains supportive and sympathetic of his wife's challenges through keeping open lines of communication and creating empathy.

Participant 2:

My son's lack of compassion and backing for his wife's PCOS-related infertility has disappointed me. He has demonstrated a lack of comprehension and frequently dismisses her feelings, blaming them to her as "overly sensitive." I've attempted to talk to him about the value of empathy and support, yet he dismisses it as unneeded drama. It irritates me to watch him

ignore her discomfort and the impact PCOS has upon her mental well-being. I feel he should make a concerted effort to better himself, be more sensitive, and actively assist his wife via this difficult period.

Support and understanding may be fostered via open and honest dialogues, education, and emphasising the significance of empathy. However, it is critical to confront and challenge any adverse views or lack of empathy in order for him to become a source of strength and support for his wife at this trying time.

Examining the tactics that participant used to encourage open and productive communication inside the family environment. This covers how they tried to ensure that discussions regarding PCOS-related infertility are devoid of judgement and blame, and instead focus on offering support and promoting understanding.

Participant 1:

We have developed a safe and supportive atmosphere where conversations concerning PCOS-related infertility are devoid of judgement and blame in order to foster open discourse and interaction within the family. We pay close attention to our daughter-in-law's thoughts, problems, and experiences without interrupting or ignoring them.

Participant 2:

I must admit that I was not effective in encouraging open discourse and communication among members of my family about PCOS-related infertility. There have been occasions when talks have devolved into judgement and blame has been heaped on my daughter-in-law. These circumstances added to the stress and made good talks difficult. I now recognise the need of establishing a secure, non-judgmental environment for open communication.

The varied character of the data produced by Focus Group Discussions, or FGDs, serves the objective of gathering subjective points of view. FGDs provide a dynamic venue for participants to engage in candid debates, allowing varied viewpoints, shared knowledge, and interactive insights to emerge. FGDs allow the examination of complicated and nuanced opinions by bringing together persons who share a shared link or expertise, such as being mothers-in-law. Because FGDs are participatory, participants frequently build on and reply to one another's remarks, producing more profound understandings and elaborations.

In the context of investigating sensitive topics such as PCOS-related infertility or its consequences within familial and social contexts, focus groups provide a strong technique of capturing multi-dimensional viewpoints, leading to a more nuanced and thorough interpretation of the results.

Finally, the focus group discussion among mothers-in-law of married females with PCOS-related infertility gave insight on numerous areas of assistance, comprehension, and communications. While some participants admitted to past flaws and acknowledged the need for development, others offered positive experiences and suggestions for building a supportive atmosphere.

Recognising the spiritual and psychological challenges that women experiencing PCOS-related infertility suffer is obvious. Fostering a helpful workplace requires providing psychological assistance, actively listening without judgement, and showing empathy. Education on PCOS, infertility, and accessible services is critical to understanding the illness and eliminating myths.

Participants addressed the need of getting professional assistance, such as from reproductive experts, therapists, and assistance groups, to give emotional as well as practical support. It is critical to encourage open discourse and communication inside the family, free of blame and judgement, in order to create a secure place where empathy and compassion may develop.

As a whole, this group discussion emphasized the significance of empathy, information, and active participation in assisting daughters-in-law with PCOS-related infertility. Mothers-in-law may contribute to a more helpful and understanding atmosphere for their loved ones by applying the measures suggested, thereby assisting them in navigating the problems connected with PCOS-related infertility.

Chapter Conclusion

The findings of this study, when considered from the prism of habitus, Foucault's theory of bio power, and Emily Martin's viewpoint on womanhood, provide an extensive overview of the socio-psychological issues experienced by people with Polycystic Ovary Syndrome, also known as (PCOS). This study showed the complicated interplay between personal views, society standards, and medical frameworks through phenomenological examination of their lived experiences.

The habitus lens highlights the internalization of societal norms and their substantial influence on people with PCOS. The disruption in routine caused by PCOS-related issues such as

changed appearance and self-worth highlights the need for a broader dedication to their well-being. This study found that these difficulties are caused not just by the physiological features of PCOS, which is but also by the psychological aspects i.e. cultural norm.

Foucault's idea of biopower reveals the subtle yet ubiquitous ways in which power is used over the physical beings of persons suffering with PCOS. Individuals are subjected to monitoring and compliance as a result of the medicalization of women with PCOS, which is frequently defining their sense of value and identity. This study emphasizes the importance of examining and modifying healthcare practices and cultural beliefs in order to empower people with PCOS to reclaim their own bodies and identities.

Incorporating Emily Martin's viewpoint on womanhood broadens the results' gendered dimension. Martin's research of how medical language fosters gender stereotypes connects with the biological conceptualization of PCOS and its influence on fertility. The study emphasizes the critical need for a change in paradigm in tackling PCOS, away from biological determinism.

From the perspective of a researcher, the focus group talks gave essential insights into the lively relationship between the participants' actual experiences and the theoretical structures being investigated. It became clear that the socio-psychological issues that people with PCOS experience are firmly embedded into larger societal institutions. The collaborative aspect of the focus group talks allowed participants to draw on other people's experiences, resulting in a more comprehensive grasp of the subtle details that define their lives.

These debates also provide light on the respondents' resilience and adaptive techniques. Others recounted powerful experiences of self-acceptance and advocacy, while some lamented the strain of social expectations. This range of replies emphasizes the necessity of recognizing persons with PCOS's autonomy in navigating their issues and rewriting their narratives.

Finally, this research provides a comprehensive explanation of the socio-psychological problems of PCOS via the perspectives of habitus, Foucault’ bio power, plus Emily Martin's womanhood viewpoint. It not only reveals the complicated interaction of people's experiences and larger systems, but it also advocates for a revolutionary approach in healthcare, politics, and society attitudes. We may foster a more accepting and compassionate culture that recognizes and celebrates all aspects as being and becoming by empowering persons with PCOS to question normative narratives while assisting them in negotiating their unique paths.

CHAPTER 5: TREATMENT AND MANAGEMENT TECHNIQUES OF PCOS

- Treatment for PCOS in women varies from case to case. Ovulatory failure, menstruation issues, and androgen-related symptoms are all potential causes of infertility (Badawy & Elnashar, 2011). The literature on psychological aspects of PCOS is scant in comparison to the large quantity of study on the medical and scientific components of the disorder. It is a fact, however, that women with PCOS have a higher risk of experiencing a wide range of serious mental health problems, such as anxiety, depression, and sensitivity in relationships; body dissatisfaction, which can disrupt mood, lead to eating disorders, and cause sexual unease; and a general decline in quality of life.
- Obesity tends to raise risk, but the aetiology of specific mental health implications is often uncertain. And because PCOS strikes at the very core of modern notions of femininity (Himelein & Thatcher, Polycystic Ovary Syndrome and Mental health: a review, 2006), its characteristic symptoms can have a significant negative impact on self-image.
- As a result, it appears that there are a variety of treatments available for PCOS, despite the fact that the biological approaches tend to be somewhat costly. Many have found success with long-term therapy for PCOS, including dietary and lifestyle changes, physical activity, homoeopathy, and even religious tenets.
- 5.1 Opinions from the medical community
- When asked about the rise in PCOS cases, doctors cited "modern lifestyles," "shifting lifestyles," "urbanisation," and "Westernisation," as well as unhealthy diets, apathetic habits, a hectic pace of life, a lack of uniformity in meal and sleep schedules, sleep deprivation, and even shifting gender roles, particularly in the urban middle class. Most medical professionals pointed the finger at the patient's diet, citing takeaway and fast food as well as dietary imbalances and over eating as causes.
- A move towards "high fat, high carb, fructose-based" foods and fast food has led to a "transition from "homo sapiens to homo addicts," as stated by dietitian Urooj. Most respondents expressed worries about their inactivity and eating habits. The gynaecologist Dr. Sobia Mumtaz highlighted these concerns, saying, "PCOS is a syndrome which I saw after every couple of patients on regular bases." It's especially widespread among young adults and middle-aged women who are married. Both medical professionals and I agree that addressing PCOS's dietary causal component is

an absolute need. The alternative to medication may be a well-balanced diet rich in vitamin- and mineral-rich foods.

- According to dietitian Urooj ahmed, "wasting dopamine" causes endocrine difficulties since people "sleep late, fail to eat at regular times, and work during times of rest."Today's youth are constantly surrounded by distractions. They are constantly active on social media and other online platforms like Facebook, which has been linked to altered sleep patterns and irregular menstrual and endocrine cycles.
- Dr. Sobia Mumtaz, a gynaecologist, has discussed the biological causes and symptoms of polycystic ovary syndrome (PCOS). "In our local term we told our patients that these are "pani ki theliya" or sometimes "pani kay bulbulay,"" she explained, referring to the Filipino name for polycystic ovary syndrome. Menstrual abnormalities, hirsutism, and ultrasonography are the three main areas to concentrate on when making a diagnosis. These are the three main criteria, and if at least two of them are met, we can diagnose PCOS.
- There are several potential biological explanations for PCOS, but no single one has been definitively established as the root cause. The precise origin of polycystic ovary syndrome (PCOS) is debated; possible explanations include genetics, environmental factors, and hormone imbalance. Dr. Sobia provided an overview of the essentials for understanding PCOS's foundations.
- When follicle stimulating hormone (FSH) levels drop and luteinizing hormone (LH), insulin, and testosterone levels rise, a condition known as polycystic ovary syndrome (PCOS) develops. However, the typical cycle differs in that the pituitary gland (located in the brain) secretes chemicals that aid in FSH migration and ultimately lead to Oestrogen production. The average duration of a menstrual cycle is between 29 and 31 days. Polycystic ovarian syndrome develops when this mechanism is disrupted. It is unclear what causes this hormonal imbalance, although both heredity and food play important roles. Insulin resistance occurs when the body's insulin production is excessive, as occurs when eating a diet high in refined carbohydrates like those found in processed foods. The patients' menstrual cycles and hormone levels are further disrupted.
- Second, elevated testosterone levels, which often manifest as hirsutism in PCOS patients, are a significant source of distress. Acne and extra hair on the chest, face, neck,

and body are considered as particularly distressing issues, especially for women who place a premium on their appearance.

- Last but not least, infertility is a major problem for those with PCOS, and its prevalence is growing rapidly. Cysts, which are sometimes mistaken for water bubbles or Rasoli, are actually immature eggs that prevent a woman from becoming pregnant. That's why we're calling it a syndrome; it causes far more than just this one issue, including heart issues, insulin resistance, hair fall, acne, and so on. All of these disorders can be effectively treated within the framework of biomedical research with only a few tweaks.
- Other then medication, most important thing is lifestyle modification which include 30 min walk daily, exercises, avoid refined carbohydrate like sugar, fast food, rice, specially the white floor, and bakery items.
- Secondly, it is our parent's duty since childhood we should stop using gadgets and more focused on outdoor activities and games for girls.
- if the era of organic food is comeback then all of diseases got cure easily.
- Medication always came as a second option, for infertility lezra or anti-Estrogen clomofeensintate has given, for hirsutism we prefer anti-androgen, Glucophage, metformin play an important role in insulin resistance, for the removal of permanent hair we prefer laser treatment and waxing.

Everything is important for the treatment of PCOS but on the first step life style modification is important and then medication has been given to the patient.

5.2. Alternative treatment method by practitioners

Health care systems around the world make substantial use of complementary and alternative medicine as a therapy alternative to conventional Western medicine. CAM (complementary and alternative medicine) treatments like acupuncture, Chinese herbal medicines, Tai Chi, yoga, and Qigong have been shown in multiple trials to effectively and safely manage PCOS (Jia, et al., 2021). Yoga, a form of mind-body healing that has been around for thousands of years, is a low-impact exercise that can aid in achieving and maintaining a state of harmony on all levels of one's being. As a branch of alternative medicine, it is used to treat a wide variety of conditions, such as asthma, high blood pressure, back pain, arthritis and discomfort, stress management, and polycystic ovary syndrome. Symptoms of polycystic ovary syndrome (PCOS) have been shown to improve with yoga practise, according to a study (Jia et al., 2021).

Yoga has been shown to reduce the risk of polycystic ovary syndrome (PCOS) and is a promising approach because it is inexpensive, easy to implement, and has no detrimental effects on the female ovarian system (Jia, et al., 2021). Many people who suffer from stress-related illnesses turn to meditation as a means of recovery. Patients can benefit from MBSR in terms of reduced emotional symptoms (such as worry, depression, and pressure) and enhanced physiological markers (such as pain). In addition, MBSR has been shown to reduce insulin resistance, hypertension, and inflammation. Treatment with MBSR has been shown to reduce the risk of cardiovascular disease and diabetes in people with PCOS (Jia et al., 2021).

Dr. Urooj Ahmed, a gynaecologist and registered dietitian, once remarked, "a good is the one who prefers less medicine over food," and she went on to explain that "majority of the problem of PCOS is because there is a lack of exercise and prayer, medicines is not the way to treat rather diet."

She gave the researcher permission to use this image of one of her patients who improved after adopting the recommended dietary and behavioural changes (Figure 6).


GYNECOLOGY ULTRASO

I. **Uterus:** 5.82 x 4.34 x 6.16 cm. Anteverted
Abnormalities:
The subendometrial interface is intact.

II. **Endometrium:** *Thin, 0.42cm, hyper-echoic, proliferative*

III. **Adnexae:**
Right ovary: 2.85 x 1.88 x 2.44 cm. lat
Left ovary: 2.90 x 1.20 x 2.07 cm. lat

IV. **Cervix:** 2.21 x 2.86 x 3.39 cm. Nabothian cyst:

Others:
No cul-de-sac fluid.
No intrauterine nor extrauterine pregnancy at the time of exami

DIAGNOSIS:
NORMAL SIZED ANTEVERTED UTERUS WITH THIN, INTACT, PR
NO INTRAUTERINE NOR EXTRAUTERINE PREGNANCY AT THE T
BOTH OVARIES UNREMARKABLE.
CERVIX, LONG AND CLOSE.
NO CUL-DE-SAC FLUID.

PLEASE CORRELATE CLINICALLY. *

Source-Fieldwork

ovaries reach to their normal size, showing the huge changes recorded by dietitian.

She elaborated the few things for treatment of PCOS other than medication;

- The start of any disease is that uncleanliness and unhygienic food.
- Use of dairy product is good such as yogurt, well boiled milk, remove the fatty layer i.e. *balai*[9] because that will increase the weight.
- Leafy vegetables are good for health because they contain vitamin A, use of red fruits like berry, carrot juice.
- Avoid soft drinks and convert it to naturally homemade juices such as orange, peach because they contain rich amount of vitamin c.
- Use of olive oil for cooking purpose and homemade clarified butter (*desi ghee*) is good in small amount.
- Use of unsalted nuts is also good, there is misconception in Pakistan that these nuts are hot in nature rather we should use in a balanced way and that will help to boost your health.
- Avoid broiler chicken rather move towards country chicken, fish, and mutton.
- Then refined carbohydrates such as white bread is one of the main causes of PCOS.
- Use of seed cycling is important thing to follow in herbal medication which are totally base of natural products and useful for female reproductive system. It is consisting of 6 types of seed which include; sun flower seed, flax seed, black cumin (kalwanji) seed, green pumpkin seed, fenugreek (methary), white sesame seed (safaid til).

All of these things need to be followed required time management. One of the major facts of our generation is that they skip breakfast which is the most important meal of the day, by which so many disease attacks to our immune system and results in diseases like PCOS. By following the diet plan and make life style modification will help to cure syndrome.

5.3. Homeopathic practitioner

Homoeopathic therapy regarding polycystic ovarian syndrome has been highly successful and is unquestionably the finest alternative drug for this problem. In this approach, homoeopathic medications are recommended since their ultimate goal is to cure the disease from its roots

[9] Balai: the white thick fatty layer on milk.

rather than only suppress the symptoms. Homoeopathic medications can assist in restoring and balancing the energy of the body for general well-being (homepathy, 2021).

Dr. Farzana is one the famous homeopathic doctor in Chakwal, expert for treating reproductive disorder. Researcher conducted an interview so to record her point of view. According to Dr. Farzana:

"basically, PCOS is a hormonal imbalance and homeopathic treatment is one to treat any disease from its root area. In PCOS, the target is not to cure the ovaries rather to treat hormonal imbalance so all the hormones in body function properly. In homeopathic treatment patient have to maintain the patience because it a slow process of healing and I have cure so many patients without allopathic support"

As a homeopathic doctor she elaborates the importance of homeopathic treatment over allopathic as *"PCOS is a syndrome which occur slowly, it's not sudden as people complain, they just ignore that minor symptoms such as increase use of sugar product, junk food, sleep disorder, hair fall, acne, periods gap etc. Patients need to look at the minor symptoms and need to consult their doctors at that time. When the disease took a worst form then they came to us and definitely the chances of treatment decreases. In case of emergency, no doubt an allopathic treatment such as surgeries prefer but at the initial stage if you consult your homeopathy doctor then we tried best to cure PCOS from its roots. Younger ladies with PCOD react better to homoeopathic therapy than older females. ones that are lean have a better probability of healing than fat ones. When compared to acquired instances of PCOD, genetically inherited patients take an extended period to react."*

The homeopathic medicine for PCOS are:

"in PCOS there is no fixed medicine for any disease because everyone has different symptoms. Few of them are Thuja-30 that is specially for hormonal imbalance, conium, APIS-30 for delayed or missed periods and pulsatilla also for less of delayed periods, then for heavy and painful bleeding sepia is beneficial".

Further she elaborated the homemade remedies as well; "*home remedies are equally important with medication, because all of the treatment is helpful when life-style modification is fulfilled by patient. The mixture of cinnamon powder and honey taken with milk is useful for hormonal imbalance. Excessive intake of water and yoga is helpful to keep the body away from stress,*

anxiety, depression. Because the root cause of this disease is that tension specially among married females".

The curability of women with PCOD is governed by a number of variables. Age, hereditary factors, lifestyle, food, and concomitant conditions all have a role in whether or not this ailment is curable, recoverable, controlled, or partially curable-Dr. Farzana.

5.4. Case studies

5.4.1. Case study 1: Biomedical treatment

Nimra Nadeem was 26 years old, an architect and unmarried girl living in Chakwal. Her weight fluctuates in 148-160 kg and there is no family history of PCOS patient. Major symptoms faced by nimra was swelling, blotting, no bleeding, and she was self-diagnosed by searching on her own symptoms. She was 17 years old when she was first diagnosed with PCOS, when there were no periods till 3-4 months.

Her parents were unaware of the syndrome and always taunt her of being overweight. To lose her weight she had joined gym, which results in excessive weight gain, swelling of her different body parts, skin allergy, teeth damage, and darker skin tone. The stress level increases in her mind day by day and which turned into migraine. According to nimra, her family was not supportive to her because they did not know about the disease and are not convinced for her treatment. To support her up she started tuition centre at home, and went to gynaecologist for the first time where she was correctly diagnosed with PCOS. After her huge effort of 3-4 years her mother got understand with the help of social media and successfully got her mother clear that PCOS is a syndrome to which she is suffering a lot. She was disappointed to tell that our society has no awareness about such disease. Where mother's and another female did not understand then how is it possible that male member of house could do this? However, the treatment was so expensive for her to afford and she suffered a lot in term of financially and emotionally got disturbed.

Once she got her parents clear and they were ready for treatment, her doctor gave insulin resistance injection once a week, for weight loose she has used Ozempic for a month, which result in successful weight loose of 5kg within a month. She had changed her diet plan 2 times a day and use herbal green tea which was also effective for weight loose. Later on, her father consult with another doctor and he advice for surgery which was unable to afford. Now she is on medication and used Ozempic injection once a week.

Lastly, she said: *"it was so easy to say hormonal imbalance but it was difficult to face stress, mood swings, depression, weight gain, and no periods at all".*

5.4.2. Case study 2: Homeopathic treatment

Rabail rehmaan was 24-year-old, unmarried girl clinically diagnosed with PCOS and her father was (late), totally dependent on her brother. She has been suffering from last 6 years, and now the condition is worse. Other than irregular periods cycle in which spotting was common for whole month, she has been facing face pigmentation, acne, thick hair on face and body, hair fall, and mentally stressed. She had a rarely gap of 15 days in her period cycle.

Rabail family was supportive. She went for *hakeem*[10] as well as peers like *peer Azmat shah* [11]who was settled in murre. Her mother did not believe on medical science and think of treating her spiritually and herbily. She did check-up with him up to six times but seem useless because it was also expensive for her and her sister in-law was not in support for her treating spiritually. She had faced a lot of societal pressure from people surrounding her, especially in term of marital proposal. Finally, she decided for homeopathic treatment as homeopathic was so common in Chakwal and there are so many private clinics there. She has chosen Dr. Ashfaq Munir who was famous homeopathic doctor and now she felt better as her period cycle better from 15 days to 24 now. He told her that PCOS is a problem which contain a lot of diseases at the same time and we need to treat them one by one.

5.4.3. Case study 3: herbal treatment by seed cycling

Maira was 31-year-old, married woman having fertility issues with PCOS. She was a lawyer and self-employed for her treatment. Her husband was only brother among her sister's in-laws and pressure of being childlessness is stressing her a lot. She was diagnosed with a lot of cysts in her ovaries, having overweight of 76kg, dry skin, irregular periods, swelling, and mental illness. She had been experienced 8-10 days of periods with heavy bleeding. The dream to become a Mom one day depressed her all the time and she is unable to pay attention on her work.

[10] Hakeem: a wise or learned man.

[11] Peer Azamat shah: a famous religious spiritual man, settled in murre deal with spiritual beings.

Maria said: *"my husband was normal in her reactions but I face a harsh reaction from my mother in law as his son was the only one to run his father generation and if I am unable to conceive the he might leave me. So, she put a lot of pressure in my mind"*

The mental illness was more in sense of insecurity from her husband side, and the pressure she's bearing got her mentally sick. It was seen that for working ladies, it was more difficult to manage work as a professional lawyer and house chores at the same time. the sense of guilt has also been recorded from maira, when she got rude to her clients or sometime during her sessions. Being a professional she did not care about how the way is she looking and what other feel in family of being overweight. Because as a professional lawyer she knows how to tackle with such dialogues.

For the treatment, she was on allopathic medication and later on move to herbal treatment. Maira did not found her treatment good by allopathic doctor then she consults a dietitian who gave her a diet plan and introduce her with seed cycling process. It's a process to cure PCOS using 6 types of seeds, us of which 3 type of seed were given on first 15 days and then other 3 on next 15 days until the period cycle. By using seed cycling, Maira experienced a normal bleeding and also using some herbal tea with some multivitamins recommended by Dr. Urooj ahmed online, who guided her so well and now she is hopeful for conceiving a baby.

5.4.4. Case study 4: Conceiving a child with PCOS

Sadaf saleem, was married of age 31 years and conceived a child after 8 years of marriage. Her husband was out of country and financially supportive. The symptom she had faced was irregular periods just for 2 days, weight gain, and minor facial hair. She was unable to conceive for 7 years because her husband was living abroad, and she was not aware of PCOS. First time she went for treatment and the doctor did not mentioned PCOS or any such problem. Later after two year when she checked up by Dr. Sobia Mumtaz she told her that: she had *pani k bulbuly* by which she did not conceive and her periods was also irregular. Her diet plan was not good and 4-5 days a week she prepared chicken because her father in-law had poultry farm. Dr. Sobia mentioned about her diet that:

"chicken is one of the major causes of PCOS".

She has also faced family pressure because since marriage she did not conceive for once and no miscarriage history has been recorded. Sadaf was confused and search about the disease and got scared as well. The question that rase in her mind was whether she will conceive or not? Sadaf said*: "people make gossips about you if you didn't conceive within year or two and now*

you seen its been 7 year, I was so disappointed but then I consult with another gynaecologist in kharyia and conceived a child".

Sadaf reported that in our society people did not accept a woman without child and considered *Banj*[12] which seem like abusive. In kharia, she checked her up and the gynaecologist changed diet plan and add life style modification other than medication which result in conceiving a child successfully within a year. She gives a good example of motivation for other who are hopeless of not having a child.

5.4.5. Case study 5: Homoeopathy helped a woman recover from PCOD and successfully conceive.

Ayat Fatima, a 25-year-old female patient, attended Dr. Farzana Homoeopathy a few years ago. She has been complaining about irregular menstruation for the last year. Her monthly period was erratic. She used to have menstruation every two months. She also complained about hair loss, pimples, and leucorrhoea before her period. During her menstruation, she felt irritable. She also complained of gaining weight and having problems conceiving after receiving allopathic medication. She had been married for 5 years, had a child for 4 years, and struggled to conceive the second time. Her menstrual periods in February, April, and June of 2018 were all drug-induced. Her USG result from February 7th, 2018 revealed a thick endometrium of 16.5mm and a few small follicles on each of her ovaries.

"ovary right - 42*19*26 mm & 40*21*30 mm ovary on the left".

By nature, the patient was polite, modest, and quiet. She had no prior history of any ailment. She revealed family history of diabetes, high blood pressure, uterine fibroid, and a thyroid that was underactive. Dr. Farzana provided research-based medication for PCOD to a patient following a thorough case study. She was also urged to keep a proper diet and routine.

Her USG result from October, 2018 revealed that both ovaries were large and had many tiny follicles placed peripherally inside.

The right ovary is 3.2*2.6*2.1 cm in size (vol. - 9.78 cc). The left ovary is 4.1*2.1*1.9 cm in size (vol. 10.19 cc).

Her weight has dropped to 66.2 kg. Her acne has also improved. Later, on April, 2019, the female patient reported having conceived. Her LMP date was February, 2019, and she

[12] Banj: those who did not conceive child for their whole life and infertile.

confirmed two months pregnant. On April, 2019, the patient inquired whether she could continue with homoeopathy for PCOD because she had conceived, so she was informed that she could because the drug is perfectly safe. The patient is pleased and delighted with the therapy she got to Dr. as well as intends to continue it in the future.

5.4.6. Case study 6: Religious way of healing PCOS

Syeda Nida Kazmi was 35 years-old married PCOS patient. It's been 12 years of her marriage but she is unable to conceive a child. Her symptoms include obesity, irregular period, 3 miscarriages, spotting with heavy bleeding for 2-3 months, and hair fall. She belongs to middle class family and her main concern for treatment was *Peer's*. Nida was so stressed about not conceiving a child and experienced 3 miscarriages. The level of disappointment and hopelessness increases as the time goes on.

As has been established, a woman is considered complete only when she has given birth, and if she has not done so, she is considered "barren" and given the name "baanj." The inability of a woman to have children is a social construct that originates within her immediate social circle. Harassment from her husband's family and society ensues if she is unable to fulfil the role society has determined she must play in order to meet the child's needs.

Nida also experienced similar treatment from her in-laws, as she explains, "My in-laws mother treated me like a housekeeping worker." Since I can't give her a grandchild, she sees me as useless, but I can at least pitch in with the housework.

Nida's mother suspected that her daughter was a victim of Blackmagic since she kept having miscarriages. She goes to see Mai Ismat, a well-known peerni in Chakwal, for help with her health issues. Nida is also convinced that someone performed Blackmagic on her so that she might feel such mystical force while sleeping. She has been trying to get pregnant for six years now, but no amount of religious or spiritual practise has helped her because she has been having periods the whole time. A god man told me that it was the work of black magic," she added. So this is how I ended up

unwell and began having irregular periods and have miscarriages."

Infertility is a social and personal difficulty for a woman, and when combined with the patients' lack of understanding and the pressure from their closest relatives to have a kid, it causes chaos in the patient's personal life. Nida also experienced socio-psychological stress and lack of awareness add on to her stress level. Other than spiritual way of healing she also consults

gynecologist Dr. Saima, who examined multiple cysts in her ovaries. It was seen that other than medication she was more focused toward spiritual way of healing PCOS. So, basically, there is a stigma linked to childlessness that renders the entire process and associated disorders tabooed.

5.4.7. Case study 7: Socio-Psychological distress of body image and its treatment

Kainat was unmarried girl of 25-year-old, suffering from PCOS since last 3 years. She faced unique symptoms i.e. curve bones of fingers, hair loss, irregular periods, and acne. She had a family history of diabetes. Being an unmarried girl, she had facing societal pressure and stigmatization from her close relatives and friends. According to one response, this condition caused deformation of her physique and made her feel unattractive.

She was the only sister of her 4 brothers and the most beloved one in her family. So, she took extra advantage and loved to eat of her own choice, such as fast food, sweets, soft drinks etc. later on, when she was diagnosed with PCOS it was difficult to do abstention. Obesity is strongly linked to polycystic ovarian syndrome. Physical attractiveness, particularly slimness, is widely valued in society, particularly in Western cultures. Women who have extra body weight are often regarded via a different lens and are believed to be out of control. Same in the case with kainat, she had facing harsh comments of being overweight and her physical appearance is not attractive toward society. Obesity stigma is complex; obese girls, like Kainat, conceal their bodies through clothing, movement, and posture more frequently than those of normal body weight. A link between body dissatisfaction and excessive eating disorders was also discovered. According to her:

"I feel anger toward my body as am not looking good at all, when my friends got their period on time, I got so distress, that why I?"

Other than obesity, another problem she had been facing is acne and facial hair. This is beauty among girls to have clear skin and slim body as er western standard. To achieve the hairless body and face she did laser treatment which also negatively impact on her body. According to the respondent:

"my gynecologist warns me once, for not doing laser treatment as I have bones problem which might get disturb but I did not follow her instruction and did this thing, which result in worst effect of that laser treatment on my bones and skin."

For the overall treatment, she relies on biomedical treatment and change her dietary habit which results in good results in regulation of her menstrual cycle. She is also more focused toward lite exercises and organic eating. According to her:

"as you know an apple a day keeps you from doctor away, I applied this phrase in my life and did lite exercises which are helping in my menstrual cycle".

5.4.8. Case study 8: surgical treatment of PCOS

Sara was 28-year-old student of BS mathematics, she had a track record of irregular periods, hirsutism (excessive hairy growth), and infertility. Her clinical complaints, high levels of androgen, and ultrasound evidence of polycystic ovaries led to her PCOS diagnosis. she chose to consider having surgery for treating her PCOS symptoms after researching several treatment options and discussing with her healthcare physician.

Sara had a laparoscopy ovarian drilling (LOD) treatment, which is a minimally invasive surgery used to treat PCOS. The technique includes making small cuts in the abdomen and puncturing the ovaries with specialized devices in order to suppress testosterone production and restore normal ovulation. she reported substantial relief in her symptoms of PCOS following the LOD operation. She experienced regular menstrual periods, less hirsutism, and a rise in the likelihood of pregnancy. Hormonal tests found a considerable drop in testosterone levels, indicating that the operation was effective.

Sara was symptom-free for five years after the LOD treatment and eventually conceived a child. Her menstrual periods were regular, and there was no evidence of abnormal hair growth. Following ultrasound exams, the ovarian morphology was found to be normal, with no signs of tumors or follicular abnormalities. she experienced a significant increase in her entire quality of life in addition to the physical changes. She experienced relief from the mental anguish caused by erratic periods and hirsutism, while her enhanced odds of conception relieved her infertility worry.

Women with PCOS who do not react to or tolerate alternative treatment methods may benefit from surgical procedures especially laparoscopic ovarian drilling. Although it isn't regarded as a first-line therapy, it may be helpful for certain people. Sara example highlights the long-term remission attained after surgery, highlighting the possible benefits of surgical treatment in PCOS therapy.

5.4.9. Case study 9 Surviving with PCOS: A Real-Life Experience of Social Stigma and Pressure

Polycystic ovarian syndrome represents a prevalent hormonal condition that affects reproductive-age women. This case study delves into the life experiences of a PCOS patient, concentrating on the stigma and pressures from society she endured. The goal is to bring awareness on the difficulties that people with PCOS face in society as well as to generate empathy and compassion for their situation.

After enduring erratic periods and chronic acne, tayabba got diagnosed having PCOS at her young age of 23. Her first reaction upon receiving the diagnosis was some relief, as she now had a reason for the numerous sensations she had been experiencing. Her relief swiftly changed to anguish as she realised the cultural stigma linked to her condition. Tyabba's encounter with societal stigma was profoundly moving and emotionally taxing. Family and friends frequently made crude remarks about her weight increase, hair on her face, and irregular periods. People would believe her illness was caused by poor personal hygiene and a lack of self-care, which would result in a flood of harsh words and unsolicited advice.

Tyabba Adventure Body Shaming; she was put under a lot of strain by society's artificial beauty standards. She was continually scrutinised for her weight increase, which was sometimes blamed on laziness or a lack of discipline. Her sense of self-worth and body image suffered as a result of the continual scrutiny, resulting in feelings of humiliation and self-doubt. Stress to Conceive after marriage that she will experience conceiving pressure from both her family and the larger society. The belief that PCOS invariably caused infertility was a major cause of concern. People questioned her capacity for becoming a mother and gave her unwanted advice on reproductive procedures, will add on to immense amount of mental distress.

Misconceptions and a Lack of knowledge, she discovered a lack of knowledge and comprehension about PCOS in her social group. Many individuals thought it was a self-induced disease brought on by poor dietary choices, instead of a complicated hormonal imbalance. Her emotions of solitude and frustration were exacerbated by her ignorance.

Despite the stigma and pressure from society, tyabba used numerous coping mechanisms to get through her PCOS journey; She took the effort to inform herself regarding PCOS and developed a voice for increasing awareness. To address the common misunderstandings about PCOS, she visited support groups, networked with other women suffering from the illness, and

discussed her story through internet channels, that’s how she meets the researcher as well. Tyabba sought assistance from healthcare specialists such as endocrinologists and therapists who specialize in PCOS. They gave her advice, psychological assistance and coping skills to help her handle her disease and the stress that came with it.

This case study focuses on the stigma and societal pressures that people with PCOS face. Tyabba tale focuses attention on the condition's misunderstandings and the negative impact they may have on afflicted persons. Increased awareness, compassion, and support are required to break down stigma and promote an inclusive community in which people with PCOS may thrive. We may establish a more supportive atmosphere for persons with PCOS while contributing to their general well-being by identifying and addressing these problems.

CHAPTER 6: SUMMERY AND CONCLUSION

6.1. Summery

To summarize this study by, analyzing the socio-psychological problems of Polycystic Ovary Syndrome (PCOS) from an anthropological viewpoint provides unique insights into the lived experiences of those affected by this complicated endocrine condition. We discovered a diverse environment that impacts the well-being and identities of persons diagnosed with PCOS by diving into its cultural, social, and psychological elements. However, it is critical to broaden our knowledge by embracing new theoretical frameworks, especially the idea of Emily martin about womanhood, Bourdieu idea of habitus and Foucault's notion of biopower.

The incorporation of Emily Martin's idea of "The Egg versus the Sperm" in our research adds another depth of insight to the gendered socio-psychological problems of PCOS. Martin contends that biomedical discourses frequently support gender stereotypes and maintain a binary picture of reproductive processes in which women are portrayed as passive and men are seen as engaged participants. The scientific discourse regarding fertility and reproductive has long characterized women with PCOS as aberrant or abnormal. The notion is that the hormone abnormalities and consequent difficulties in conceiving linked with PCOS impair the "natural" reproductive cycle. By looking at PCOS via Martin's eyes, we can see how medical understanding and vocabulary contribute to the formation of the disease.

Researcher saw how people with PCOS deal with societal pressure to adhere to idealized ideals of womanhood and reproductive capacity through this study. Emily Martin's idea of womanhood provides a critical viewpoint on how PCOS disrupts the standard gendered perception of female bodies and the demands put on them. Understanding PCOS via Martin's idea of womanhood enables us to investigate and confront fundamental beliefs concerning gender and reproductive procedures within medical and social settings. It urges us to recognize the range of experiences and personalities among people living with PCOS and to push for a more diverse and complex view of femininity that takes into account the complicated realities of reproduction. Incorporating Emily Martin's idea of womanhood into our examination of PCOS's socio-psychological problems broadens our knowledge of the condition's gendered elements. This study contributes towards eliminating oppressive discourses, encouraging diversity, and fighting for improved systems of support that empower people with PCOS to deal with their experiences with dignity and autonomy by thoroughly investigating the ways that PCOS disrupts conventional gender stereotypes and expectations.

Present study recognize that persons with PCOS traverse social structures and conventions that affect their experiences, drawing on Pierre Bourdieu's idea of habitus. The habitus relates to the internalized dispositions, behaviors, and expectations that individuals acquire via socialization that impact how they see and act in the environment. The study emphasized that PCOS challenges and disturbs habitual behavior, resulting in alterations in perceptions of oneself body image, and social relationships. By recognizing the habitus, researcher can gain a better understanding of how people negotiate their sense of self and seek validation from society while dealing with the medical and psychological components of PCOS.

Furthermore, Michel Foucault's idea of biopower provides a useful lens for examining the societal control and regulation of individuals and health. PCOS, as a medicalized disorder, is susceptible to biopower, which is the exercise of power over people' bodies and health management by medical practitioners, institutions, and societal norms. This study highlighted how people with PCOS feel the consequences of biopower by medical surveillance, shame, and the pressure to adhere to conventional feminine ideals. Researcher have revealed the processes by which power is exercised, criticize oppressive practices, and push for empowering ways to healthcare and assistance by analyzing the functioning of biopower in the setting of PCOS.

Anthropology enables us to grasp the range of PCOS experiences and perceptions by recognizing how cultural ideas, society norms, and individual meanings impact the socially constructed nature of this condition. This study shed light on the social stigma and psychological anguish that persons with PCOS endure through our phenomenological study, emphasizing the need of understanding and resisting cultural norms that lead to their exclusion. Self-worth and body image emerge as key problems for persons living with PCOS from an anthropological perspective. Cultural expectations of femininity, emphasizing slimness and fertility, frequently collide with the outward signs of PCOS, resulting in feelings of estrangement and low self-perception. We can promote fair beauty standards and build body positivity among varied cultures by recognizing the importance of society's views on body image and self-worth.

Furthermore, an anthropological perspective highlights the complex web of social connections and support systems that play an important part in the lives of people with PCOS. Interactions between family dynamics, relationships, and medical facilities all impact their experiences and ways to cope.

It is critical to recognize that PCOS is a complex junction of genetics, culture, and psychology rather than a single experience. The anthropological viewpoint allows us to transcend beyond a simplistic understanding of PCOS by recognizing the importance of context, power, and cultural significance in people' experiences. This study gives an idea how to build more successful plans for assistance, instruction, and medical care if we recognize and accept the range of experiences that make up the PCOS community.

The anthropological approach, as well as the ideas of habitus and biopower, contribute to an improved awareness of the socio-psychological problems of PCOS. We recognize the intricate interaction among individual experiences and societal systems by studying the habitus. Using Foucault's notion of biopower, we may investigate the power dynamics underlying PCOS and call for revolutionary reforms for health care, policy, and societal attitudes. Future research should expand on these frameworks in order to address the larger consequences of PCOS and work towards developing inclusive, supportive settings that allow people with PCOS to negotiate their socio-psychological issues with agency and dignity. Finally, an anthropological viewpoint broadens our knowledge of the socio-psychological problems of PCOS by shedding light on how social, cultural, and individual experiences intersect. This study might useful to create better empathy, fight for inclusive practices, and add to the health and empowerment of those living with PCOS by adopting this viewpoint.

In conclusion, delving into the socio-psychological intricacies of Polycystic Ovary Syndrome (PCOS) through an anthropological lens has been an enlightening journey. The study has unveiled a rich tapestry of experiences, where cultural, societal, and psychological threads intricately weave together to form the diverse narratives of those grappling with this condition. As a researcher, immersing in the lives of PCOS individuals and integrating novel theoretical frameworks like Emily Martin's womanhood, Pierre Bourdieu's habitus, and Michel Foucault's biopower has unveiled a deeper layer of understanding.

Navigating the anthropological landscape, this study has come to recognize that PCOS is not a monolithic experience but rather a complex interplay of genetics, culture, and psychology. This understanding goes beyond the surface, acknowledging the multifaceted dimensions that shape each individual's journey. As a researcher, this realization reinforces the urgency of advocating for more inclusive policies, empathetic healthcare systems, and comprehensive support networks that honor the rich diversity of PCOS narratives. Ultimately, this anthropological odyssey has broadened the researcher's perspective, cultivating empathy and inspiring the

pursuit of impactful changes that empower individuals to confront their socio-psychological challenges with resilience and dignity.

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6.1. Recommendation and Suggestion

This study emphasises the necessity for more anthropological research into many elements of PCOS in order to solve the condition's complicated problems. For starters, there is a crucial gap in our knowledge of PCOS-related dietary patterns. Anthropological research should look at how social, cultural, and economic aspects impact nutritional decisions, which might pave the way for individualised dietary interventions that take into account different cultural settings.

Second, the cultural approaches on PCOS treatment approaches require further investigation. Future study should look at how culture beliefs and behaviours influence treatment acceptability and efficacy. Understanding cultural subtleties allows healthcare practitioners to give more culturally relevant and effective therapies, improving patient outcomes.

Furthermore, it is critical to investigate the levels of PCOS awareness and understanding amongst both patients as well as healthcare practitioners. Anthropological studies of the socialisation of awareness can help shape focused public health initiatives and medical education programmes. We can encourage early identification and good care of PCOS by addressing cultural ideas and societal attitudes.It is also critical to do research in anthropology which concentrate on the bodily experiences of people with PCOS. These investigations would look at how cultural notions of body appearance self-esteem, and femininity connect suffering the lived experiences of people with PCOS, providing insights that might be used to guide therapies aimed at overall well-being.

Another facet that has yet to be thoroughly investigated anthropologically is socioeconomic considerations. Investigating how economic inequalities affect access to medical services, adherence to therapy, and general quality of life for people with PCOS might reveal gaps that require to be resolved for equitable healthcare results.Cross-cultural comparative studies are another promising path for future research. Researchers can find commonalities and variances in how PCOS is seen and handled across various nations and cultures, providing a comprehensive understanding of the socio-cultural influences impacting the lives of persons with PCOS.

Anthropological research should focus on family dynamics and their impact on individuals with Polycystic Ovary Syndrome (PCOS). Understanding family support, expectations, and intergenerational knowledge transmission can help develop family-centered interventions. Additionally, examining cultural and social dimensions of mental health implications can inform integrated healthcare strategies. Nuanced anthropological research complements medical perspectives on PCOS, fostering a holistic understanding and targeted interventions for individuals affected by the syndrome.

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8. ANNEXURE

8.1. Interview Guide

Name: _____

Age: _____

Qualification: _____

Occupation: _____

Family history of PCOS: _____

Q1: What is your personal perception of women's health? What do you know about reproductive health?

Q2: Have you ever heard of PCOS before it happened to you?

Q3: What are the possible reasons for developing PCOS in your body?

Q4: When were you first diagnosed with PCOS?

Q5: What symptoms do you feel in your body?

Q6: What is the major gap between your periods?

Q7: How long or how many days have you experienced your periods?

Q8: What changes do you feel during your periods (weight gain, stress, hair growth)?

Q9: Have you ever felt stress or anxiety due to prolonged or delayed periods?

Q10: How many times have you eaten in one day?

Q11: Have you ever been investigated for infertility?

Q12: If you have been pregnant, how many times have you faced miscarriage or abortion?

Q13: Does any of your family or friends experience PCOS?

Q14: Do you have a family history of diabetes?

Q15: Do you find it difficult to tell your family and husband about PCOS? What are their reactions to it?

Q16: Is your husband supportive of the treatment of PCOS?

Q17: Do you think PCOS can impact your social and marital life?

Q18: Do you think PCOS is a hurdle to regulating religious practices in everyday life?

Q19: What economic difficulties did you face for the treatment of PCOS?

Q20: Have you ever felt guilty for being too aggressive toward your family and friends?

Q21: Do you feel embarrassed by the way you look? Did anyone comment on your body image and weight?

Q22: Do you think PCOS is controlling your personal life?

Q23: What struggles have you faced to have children?

Q24: How do people respond to your PCOS at social gatherings?

Q25: Have you ever been harmed by other people's opinions of you and the manner in which they stigmatize you?

Q26: What type of treatment method did you use for PCOS? Are they effective or not?

Q27: Are you satisfied with the treatment?

Q28: Are there any side affects you have faced because of treatment?

Q29: Have you ever tried an herbal treatment method (Homeo, Peer, or Dam Darood)?

Q30: Do you think a good diet can help in the management of PCOS? Have you ever had a concern with a dietitian?

Q31: Have you focused on physical activities like gym work, exercise, or yoga?

Q32: What do you think you will get out of PCOS or from living with it your whole life?

Socio-Psychological Challenges of women having Polycystic Ovary Syndrome (PCOs)

Dr. Amula Seetha
Thesis Supervisor

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by Bushra Saleem

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