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The Support Systems and Coping Strategies of Infertile Women Attending the Out-Patient Consultation Unit of CHRACERH Yaoundé, Cameroon: A Cross-Sectional Study

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Abstract

Background: Infertility is a complex disorder with significant psycho-social and economic consequences. It globally affects 10% - 15% of couples. In Cameroon, little is known about what women do to overcome the psychosocial aspects of the disease. **Objectives:** This study aimed to identify the support systems and coping strategies of infertile women attending the outpatient consultation unit of the Gynaecological Endoscopic Surgery and Reproductive Teaching Hospital (CHRACERH), Yaoundé, Cameroon. **Methods:** A hospital-based cross-sectional study was conducted from the 14th of March to the 6th of April 2023 at CHRACERH Yaoundé. A total of 190 participants were recruited using a convenience sampling method. Data regarding socio-demographic characteristics, support systems and coping strategies were collected using a pretested questionnaire. Descriptive and analytic statistics were conducted using SPSS version 25. **Results:** The mean age of participants was 39.52 ± 7.64 years. The majority 78.9% of participants were workers (public, private sector, or traders) and were Christians 95.8%. The most common source of psychological support was from family 76.8 and husbands 72.63%. Most of the participants 89.5% resorted to prayer and getting busy 48.4% as a coping strategy. There was no statistically significant relationship between coping strategies and psychological disorders $p > 0.05$. **Conclusion:** The main support system of participants was family, husband, and friends.

Prayer, getting busy and adoption were the most common coping strategies. There is a need for the Ministry of Public Health and other stakeholders to put in place other support systems and coping strategies (FELICIA) used elsewhere and provide adequate health education and infection control to prevent infertility in Cameroon.

Keywords

Infertility, Coping Strategies, Support Systems, Mental Health, Women

1. Introduction

Infertility is a complex disorder with significant psychosocial and economic consequences, particularly in developing countries [1]. The World Health Organization (WHO), the American Society for Reproductive Medicine (ASRM), the European Society for Human Reproduction and Embryology (ESHRE), and the American Medical Association (AMA) have defined infertility as a "disease of the reproductive system characterized by failure to achieve a clinical pregnancy after 12 months or more of regular, unprotected sexual intercourse" [2] [3] [4]. Evaluation and treatment for infertility may start at 12 months for women under 35 and at 6 months for those who are 35 years of age or older, provided no other issues are present. For women over 40, more immediate evaluation and treatment may be recommended [5].

Infertility is a major public health problem during reproductive age, affecting about 10% - 15% of women attempting to achieve pregnancy worldwide [6]. It affects a good number of women in Africa, accounting for a prevalence as high as 32% in some ethnic groups and 10% to 30% of couples in Cameroon being affected [7].

For many women, the inability to bear children is a shocking tragedy, leading to serious social and psychological problems in their lives including anger, depression, frustration, loss of self-esteem, jealousy, poor quality of life, guilt, anxiety, marital problems, sexual dysfunction, stigma, and social isolation [6] [8].

Several studies have reported coping strategies employed by infertile men and women undergoing infertility treatment. Both men and women undergoing infertility treatment used the internet to seek a broad range of information and support resources related to infertility. Most of them reported that web-based resources met their needs [9]. Others have proposed "patient-centred infertility care" that highlights the interaction between system (health facility) and human (caregivers/patients) factors and their interactions in fertility centers [10] [11]. Implementing mental health professionals on the fertility care team has been beneficial for both patients and fertility providers; patients are more likely to receive psychological treatment when indicated, have reduced the stigma of pursuing psychotherapy, have decreased wait times for referrals, and have improved treatment outcomes. On the part of caregivers, there is an improved under-

standing of patients' needs, it is easier to navigate in-network referrals, there is a reduced time burden, it allows for focused fertility care appointments, there is a faster time to a referral appointment, and patients are more likely to complete treatment [12].

A study in Mali reported that coping strategies among infertile women included traditional and biomedical treatments, religious faith and practices, and self-isolation. They suggested that healthcare professionals should provide holistic care for infertile women to meet their physical, spiritual, psychological, and social needs [13]. A similar study conducted in Nigeria reported that prayer, getting busy, accepting fate, being optimistic, and self-blaming were the most frequently used coping strategies [14]. A meta-analysis done by Poorovogal *et al.* 2022 found that there was an inverse relationship between religion and suicidal ideation, suicidal plan and suicidal attempt $p = 0.001$ [15]. This implies that religion plays a protective role against suicidal behaviors. In addition, mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps how we handle stress, relate with others, and make healthy choices [16] [17].

The "Fertility Life Counseling Aid" (FELICIA) to manage the psychological morbidity associated with infertility using cognitive behavioural therapy (CBT)-based strategies has been reported and used in Nigeria [18] [19]. FELICIA is a cognitive behavioural intervention that teaches users how to recognize unhealthy patterns of thinking, how to replace unhealthy thinking with healthy thinking, and how to practice healthy thinking and behaviour. It includes a multidisciplinary approach that is holistic in nature and centres therapy around the unique needs of each patient. FELICIA makes it possible for infertile men and women to lead more fulfilling lives both during and after ineffective therapies. It is a cost-effective option to deliver holistic care to patients treated for infertility by community health workers and nurses, especially in resource-poor settings [18] [19]. That notwithstanding, ASRM and ESHRE have not universally standardized recommendations or methods for embedding mental health providers into the fertility treatment team [12] [20] [21].

In Cameroon, however, there is a dearth of knowledge regarding the support systems and coping strategies for the psychological and social consequences of infertility. This study is aimed at identifying the support systems, and coping strategies adopted by infertile women attending the outpatient consultation unit of CHRACERH, Yaoundé-Cameroon.

2. Materials and Methods

2.1. Study Design and Setting

This was a hospital-based cross-sectional study conducted from the 14th of March to the 6th of April 2023 at the outpatient consultation unit of CHRACERH, which is a tertiary healthcare facility situated in the Ngousso neighbourhood of Yaoundé, the capital city of Cameroon. CHRACERH is a tertiary healthcare fa-

cility that provides scientific-based treatment, research and teaching of medical students and resident doctors. It is made up of a gynaecological ward, a labour room with five beds, two delivery rooms, a neonatal intensive care unit, and five operating theatres (one for obstetrics and four for gynecologic surgical procedures). It also has two hospitalisation wards, a unit for assisted reproductive technology (ART), a laboratory, echography rooms, a blood bank, an emergency unit, and an outpatient consultation unit. The building, which has five floors, is made up of specialized equipment to conduct its various missions, including endoscopic surgery, in vitro fertilization, and pelvic reconstructive surgery.

2.2. Study Population

The study population consisted of all infertile women attending the outpatient consultation unit of CHRACERH and those receiving IVF/ICSI treatment during the study period. All women who gave their consent to participate in the study were included. We excluded from the study all infertile women who did not consent to the study and those whose questionnaires had missing data.

2.3. Sampling Method and Sample Size Calculation

The sample size was calculated using Cochran's formula for a cross-sectional study ($n = z^2pq/e^2$). Using an estimated proportion "p" of psychosocial effects of infertility of 11.2% from a study by Olowokere *et al.* in Nigeria, [14] the calculated minimum sample size was 153 participants ($n = [1.96^2 \times 0.112\ [1 - 0.112]]/0.05^2 = 153$). The sampling technique was consecutive, involving all women who met the inclusion criteria during the data collection period.

2.4. Pretesting of Questionnaire

The questionnaire was administered to 10% of the calculated sample size (15 participants) for content comprehension and validity. Questions that were ambiguous or not well understood by participants were modified. Secondly, the GHQ-28 that we used to study mental health is a questionnaire that had already been validated.

2.5. Study Procedure

After obtaining ethical clearance from the Institutional Review Board of the Faculty of Health Sciences of the University of Buea (ref. no. 2023/1935-01/UB/SG/IRB) and administrative authorization from the Dean of the Faculty of Health Sciences (ref. no. 2023/227/UB/VD/RC/FHS) and from the Managing Director of CHRACERH Yaoundé, Women that came for infertility consultation and those that were already on IVF/ICSI treatment protocols were approached, and the objectives, inclusion criteria, risks, and benefits of the study were explained to them, and they could withdraw from the study at any time. Those who accepted to be part of the study signed an informed consent or verbal consent. Participant enrollment was done daily by the principal investigator during the

data collection period.

Data collection was done using a structured questionnaire available in French and English divided into 3 sections (A, B, C). Sections A and C were preconceived and for section B, we used the General Health Questionnaire (GHQ) 28. The GHQ-28 was developed in a few countries by Goldberg and Williams, in 1988, and has been translated into about 38 languages, and over 50 validity studies published.

Section A: Sociodemographic characteristics of participants (age, parity, occupation, educational level, marital status, religion, source of pressure, type of infertility, etc.).

Section B: General evaluation of psychological state.

Section C: Psychological support and coping strategies.

- Source of psychological support: partner or husband, family, friends, brother or sister-in-law, psychologist, infertility support group, all the above, none of the above
- Source of coping strategies: prayer, getting myself busy, staying with children, following a treatment, other strategies, no strategies

At the end of the study, basic information regarding infertility and various coping strategies (the importance of psychologists, social workers, etc.) was given to the study participants. We also highlighted the limitations of prayer and getting busy as coping strategies. This study has been conducted according to the ethical principles of the Helsinki Declaration [22].

2.6. Data Management and Analysis

The collected data was coded, double-entered, and analyzed using the statistical package for the social sciences (SPSS) version 25. Descriptive statistics was used where categorical data (occupation, educational level, religion) were presented as frequencies and percentages, whereas continuous variables (age, duration of infertility, etc.) were expressed as means, standard deviation, and range. A chi-square test was used to determine associations between coping strategies and psychological disorders. Statistical significance was set at $P < 0.05$.

2.7. Definition of Terms

- **Coping strategies**: an action, a series of actions, or a thought process used in meeting a stressful or unpleasant situation or in modifying one's reaction to such a situation [23].
- **Support systems:** a network of personal or professional contacts available to a person for practical or emotional support [24].
- **Social support:** Social support is a phenomenon that involves the interactions of people, so when a person offers social interaction, it has an important role in his health [25].

3. Results

Data was collected from March 14 to April 6, 2023, at the outpatient consulta-

tion unit of CHRACERH from Monday to Friday during consultation hours. During that period 210 participants were enrolled, but only 190 (90.48%) were interviewed and completed the study (Figure 1).

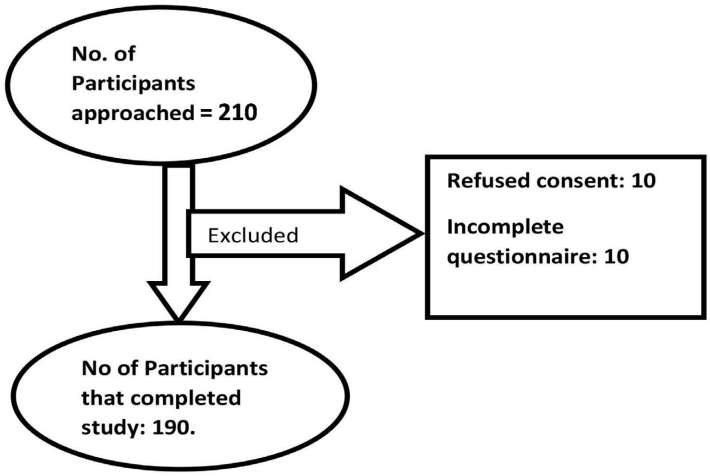

Figure 1. Study participants' flow chart.

3.1. Socio-Demographic Characteristics of Participants

The ages of the participants ranged from 22 to 60 years, with a mean age of 39.52 ± 7.64 years. Less than half, 80 (42.11%) of the participants were in the age group of 31 - 40 years; 128 (67.37%) were married; And 150 (78.94%) worked either in the public or private sector or as traders. Furthermore, 120 (63.16%) participants had a university education and 185 (97.37%) were Christians (Table 1).

Table 1. Socio-demographic characteristics of participants.

Variables	Categories	Frequency	Percent (%)
Participants age group	21 - 30	23	12.1
	31 - 40	80	42.1
	41 - 50	72	37.9
	51 - 60	15	7.9
	Total	**190**	**100**
Marital status	Divorced	6	3.2
	In relationship	43	22.6
	Married	128	67.4
	Single	10	5.3
	Widow	3	1.6
	Total	**190**	**100**
Occupation	Housewife	33	17.4
	Private worker	54	28.4
	Public worker	66	34.7

Continued

	Student	7	3.7
	Trader	30	15.8
	Total	**190**	**100**
Educational level	None	1	0.5
	Primary	11	5.8
	Secondary	58	30.5
	Tertiary	120	63.2
	Total	**190**	**100**
Religion	Christian	182	95.8
	Muslim	5	2.6
	Others	3	1.6
	Total	**190**	**100**

3.2. Clinical Characteristics of Participants

The majority 140 (73.7%) of participants had never given birth, 123 (64.7%) had a duration of infertility ranging from 1 to 10 years, 101 (53.2%) had secondary infertility, 91 (47.9%) believed they were responsible for infertility, and 185 (97.4%) did not receive any form of psychotherapy (Table 2).

Table 2. Clinical characteristics of study participants

Variables	Categories	Frequency	Percentage (%)
Parity	More than one	12	6.3
	One	38	20
	Zero	140	73.7
	Total	**190**	**100**
Type of infertility	Primary	89	46.8
	Secondary	101	53.2
	Total	**190**	**100**
Cause of infertility	Both of us	21	11.1
	Myself	91	47.9
	My partner	15	7.9
	No idea	57	30
	The curse	2	1.1
	Witchcraft	4	2.1
	Total	**190**	**100**
Diagnosed of a psychological problem due to infertility	No	185	97.4
	Yes	5	2.6
	Total	**190**	**100**

Continued

Source of pressure to get pregnant	Myself	143	76.1
	My husband	54	28.7
	My family	41	21.8
	My friends	18	9.6
	All of them	21	11.2
	Total	**277**	**147.3**
Treatment orientation	Hospital	178	93.7
	Traditional healers	46	24.2
	Psychotherapist	51	26.8
	Church	40	21.1
	All of them	12	6.3
	Total	**327**	**172.1**
Duration of infertility (years)	1 - 10.	123	64.7
	11 - 20.	47	24.7
	>20	20	10.5
	Total	**190**	100

NB: Some items have multiple responses.

3.3. Source of Support of Study Participants

The main sources of support for participants were from family 76.8%, husband/partner 72.6%, and friends 49.5%. Only 3.2% of participants consulted a psychologist while 2.6% were with an infertility support group. However, only 1.1% had no source of support (Figure 2).

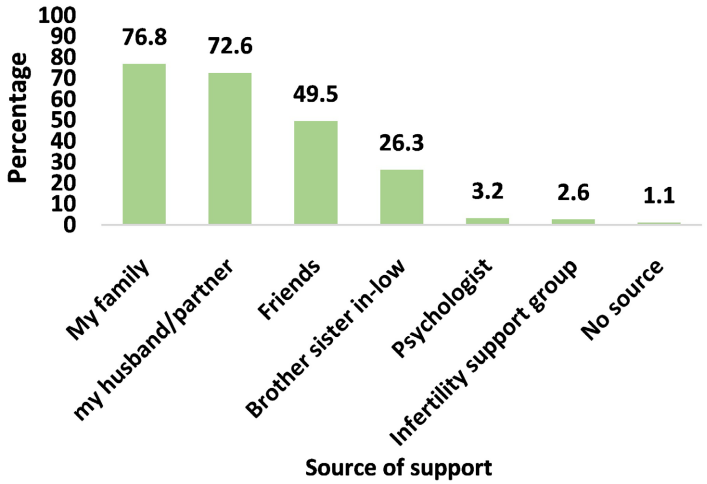

Figure 2. Source of psychological support

3.4. Coping Strategies of Participants

As regards coping strategies for infertility, 89.5% used prayer, 48.5% preferred getting busy, 25.8% adoption, and 10.5% went for infertility treatment while

2.1% had no strategy (Figure 3).

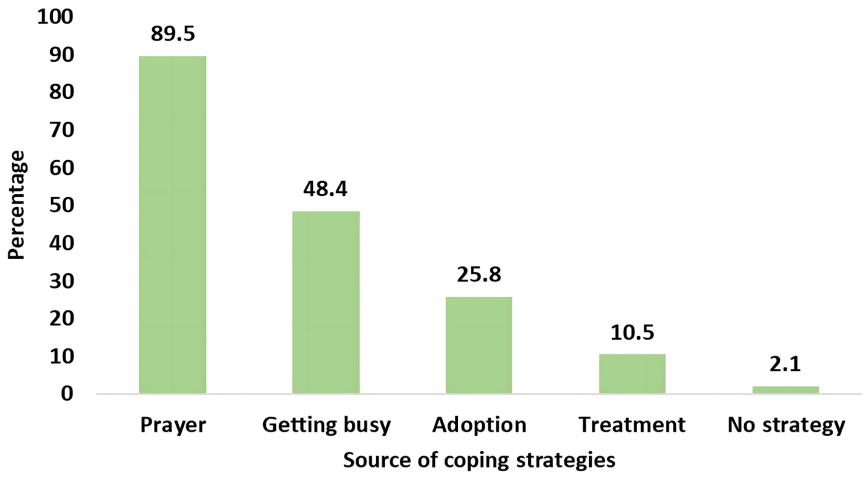

Figure 3. Source of coping strategy.

3.5. Association between Coping Strategies and Psychological Disorders

Among the 76 (40%) participants with psychological disorders, 70 (36.84%) used prayer as a coping strategy (P = 0.335), 37 (19.47%) getting busy (p = 0.953), 19 (10.0%) adoption (p = 0.839), 11 (5.79%) certain treatments (p = 0.148) and 2 (1.05%) had no strategy (p = 0.680). There was no statistically significant association between coping strategies and psychological disorders among study participants p > 0.05 (Table 3).

Table 3. Association between coping strategies and psychological disorder.

Variables	Categories	n	Psychological disorder				Chi-square	p-Value
			Yes	%	No	%		
Prayer	No	20	6	3.16	14	7.37		
	Yes	170	70	36.84	100	52.63	0.931	0.335
	Total	**190**	**76**	**40.00**	**114**	**60.00**		
Getting busy	No	98	39	20.53	59	31.05		
	Yes	92	37	19.47	55	28.95	0.004	0.953
	Total	**190**	**76**	**40.00**	**114**	**60.00**		
Adoption	No	141	57	30.00	84	44.21		
	Yes	49	19	10.00	30	15.79	0.041	0.839
	Total	**190**	**76**	**40.00**	**114**	**60.00**		
Treatment	No	170	65	34.21	105	55.26		
	Yes	20	11	5.79	9	4.74	2.096	0.148
	Total	**190**	**76**	**40.00**	**114**	**60.00**		
No strategy	No	186	74	38.95	112	58.95		
	Yes	4	2	1.05	2	1.05	0.17	0.680
	Total	**190**	**76**	**40.00**	**114**	**60.00**		

4. Discussion

This study aimed to identify the support systems and coping strategies of infertile women attending the outpatient consultation unit of the Gynaecological Endoscopic Surgery and Reproductive Teaching Hospital (CHRACERH), Yaoundé, Cameroon.

4.1. Socio-Demographic Characteristics of Study Participants

The mean age of participants was 39.55 ± 7.6 years. This finding is not consistent with the 35.0 ± 6.14 years reported by Olowokere *et al.* in Nigeria [14] and the 36.5 ± 2.8 years reported by Agostini *et al.*, in Italy [26]. This could be explained by the fact that the level of schooling for girls is increasing in our environment, so women start motherhood a little later. The majority of participants 67.4% in this study were married. Other studies have shown that married people tend to have more positive mental health outcomes than those who are single, separated, divorced, widowed and widower ($p = 0.000$, 95% CI = −0.116 - 0.2563) [27]. Mental health advantages accrue as individuals move from less attachment to more attachment. Marriage has the most benefits in part because relationships provide social integration and heightened feelings of self-worth [27]. However, in this study, the association between demographic characteristics and psychological disorder did not show any statistical significance ($p > 0.05$). The duration of infertility among study participants ranged from 1 - 20 years with a mean duration of infertility of 10.27 ± 7.8 years. This finding is not consistent with the mean duration of 4.1 ± 3.52 years and range of 1 - 5 years reported by Olowokore *et al.*, in Nigeria [14]. This can be explained by the delay in seeking medical attention, lack of enough medical expertise and financial deterrents for optimal management of infertility. Patients come to CHRACERH, a tertiary (referral) healthcare facility relatively late after attending other hospitals, traditional or spiritual remedies.

4.2. Support Systems of Study Participants

Social support can be a critical component of how a woman adjusts to the unexpected stress of infertility. Findings from this study revealed that most participants received support mainly from their family members 76.8%, husbands/partners 72.6% and friends 49.5% while only 3.2% of participants consulted a psychologist. Similar findings were reported by Olowokere *et al.*, in Nigeria where the main source of emotional support was from the husband (59.8%) and family members (34.2%) [14]. In addition, Anokye *et al.*, reported that the main source of emotional support was from family, [28] while Karaca *et al.* in Asia reported that husbands were responsible for 92% of emotional support among infertile couples [29]. This similarity could be because family members and husbands constitute two groups that are usually closer to the participants, therefore, can be involved or aware of the difficulties that participants are going through. Also, the stress of infertility may bring them together and strengthen their relationship. In

addition, only a few women got support from a psychologist.

In an Australian study, a highly motivated sample of women actively sought alternative forms of support. The Traditional Chinese Medicine approach to infertility management increased women's sense of autonomy and control through education and continuity of care. However, the need for greater societal understanding and support remained [30]. Another study shows that infertility-related stress levels and perceived social support have a direct effect on the choice of coping strategies in Vietnamese women diagnosed with infertility [31]. However, these studies were conducted in high-income countries that may be better equipped to handle mental health issues regarding infertility. This is different in Cameroon (sub-Saharan Africa) where women are held responsible for infertility issues and the family of the husband (or both families) impose stress on the woman (or the couple) and even more so for the woman who is most often left alone. Given the lack of well-codified psychological and social support, women feel obliged to fall back on work or prayer.

Furthermore, mental health is still a taboo subject in Cameroon. It is not common for patients to seek attention from health professionals spontaneously (and even less so from a mental health professional) if there is no prior medical referral.

Other studies have reported that among infertile patients receiving IVF treatment the impact on mental health increases with treatment duration and number of unsuccessful attempts and therefore there should be a greater emphasis on mental health support for couples who have undergone multiple treatment cycles [32]. Therefore, there is a need to integrate medical staff or caregivers in the infertility treatment team [20] [33] [34] [35]. CHRACERH is a tertiary care public healthcare facility in Yaoundé-Cameroon, that specialised in the treatment of infertility using assisted reproductive technology (IVF-ET/ICSI), but there is a lack of skilled trained medical psychologists/psychiatrists or mental health specialists and sociologists that could be part of the Infertility/IVF team mostly due to the absence of an ongoing training program. There are also no support groups in our infertility clinic, though some participants may not like to share their problems publicly. This fact highlights the need for the FELICIA intervention that is ongoing in Nigeria to be integrated in Cameroon because it favours task shifting where community health workers and nurses could be trained to deliver a cost-effective and holistic mental health care to patients treated for infertility [18] [19].

4.3. Coping Strategies of Study Participants

Most studies report a positive association between religiosity and spirituality and aspects of mental health such as higher life satisfaction and meaning in life, a lower prevalence of anxiety and depression, suicidal tendencies, substance abuse and better cognitive functioning [36] [37] [38] [39]. Though currently, epidemiology is at the forefront of providing robust evidence showing that associations between religion and health are causal [40]. The most prevalent coping strategies

adopted in this study were prayer 89.5% followed by getting busy 48.4%. This is consistent with Olowokere *et al.*, in Nigeria, who reported that prayer (89.5%) and getting busy (82.98%) were the coping strategies in their study [14]. A study in Ghana reported that, besides biomedical causes of infertility, witchcraft and spiritual causes have also been cited. Patients seek help from traditional and religious healers (churches, meditation, and prayer) for spiritual redress [41] [42]. People with high levels of religious involvement, religious silence and intrinsic religious motivation are at reduced risk for depressive disorders [43] [44]. This suggests that religious involvement might exert a protective effect against the incidence and persistence of depressive symptoms or disorders [43]. Notwithstanding, religious service attendance is associated with fewer depressive feelings, but the opposite is true for frequency of prayer. Second, the association between religiosity and depression is moderated by the religious context. In less religious regions, depressive symptoms relate less to service attendance than in highly religious regions, while the frequency of praying relates to more depressive symptoms in regions with lower levels of religiosity [44]. In Cameroon, infertility and IVF centres are inaccessible (found only in Yaoundé and Douala) and it is challenging for people who live in remote areas to get to these locations. Furthermore, there is a dearth of understanding regarding the various assisted reproductive technology (ART) procedures (IUI and IVF), their costs, and treatment outcomes in Cameroon. Besides, the customs and beliefs of the indigenes of Cameroon could also be important, and people find it difficult to accept the unknown [45]. In Cameroon, infertility/IVF treatment users' attitudes differ according to their ethnic and religious backgrounds because there are several denominations in Cameroon, ranging from Christianity to Islam and animism.

The current study found that 95.8% of participants were Christians. Other studies have shown that religion may inhibit a person from acting on suicidal ideas by providing access to a supportive community, shaping a person's beliefs about suicide, providing a source of hope, and providing ways to interpret suffering [46]. However, another study reported that infertile women lost faith in God [47].

Getting busy was noted in 48.4% of study participants. This is a form of diversional therapy or denial used by the women to take their minds off the problem. This has also been reported previously [47]. However, another study reported that: 1) Creating more space or removing oneself from reminders of infertility; 2) Establishing regulations in effect to gain control; 3) Trying to boost one's own ego by performing at the top or being the best; 4) Searching for the root cause of infertility; 5) Caving in to emotions; and 6) sharing the load with others are ways of coping with infertility among infertile women [48].

5. Conclusion

Most study participants were in their late thirties, and the family and the husbands offered psychological support to participants. The respondents used prayer and keeping busy as coping strategies. Poor psychological and social

support for women undergoing infertility treatment can have significant implications (anxiety, depression, negatively affected relationships, etc.) for clinical practice. These factors can also have an impact on the success of fertility treatments. It is therefore essential that the public authorities develop support programs for couples undergoing infertility treatment; that healthcare professionals are trained to recognize and deal with the psychological aspects of infertility; and that the public is made aware of the need to reduce the stigmatization of infertile couples. Finally, it is crucial to integrate a holistic approach into the management of infertility, considering the emotional and social needs of patients in addition to their medical needs.

5.1. Strengths of Study

To the best of our knowledge, this is the first study of its kind in Cameroon regarding support systems and coping strategies of infertile women. The study will provide baseline data for stakeholders in Cameroon regarding the support systems and coping strategies for infertility. Further research should focus on a qualitative study by using in-depth interviews and focus group discussions to elucidate patients' views and partners on the support systems and coping strategies of infertility.

5.2. Study Limitations

This is a single-centre study; therefore, the results may not be generalized to the whole of Cameroon. The study targeted only females, not taking into consideration the perspective and experiences of infertile couples and their partners. The small sample size may not permit certain conclusions.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Questionnaire

Patient code:

Section A: Sociodemographic and clinical characteristics

Please read carefully and tick the box that corresponds to you.

1) Age:

2) Parité: Zero □ 1 child □ More than one child □

3) Occupation: student □ Housewife □ Civil servant □ Private worker □ Trader □

4) Educational level: None □ Primary □ Secondary □ Tertiary (university) □

5) Marital status: married □ Single □ Divorced □ Widow □ In relationship □

- Raison of divorced been infertility: Yes □ No □

6) Religion: Christian □ Muslim □ Pentecost □

7) Infertility duration (year):

8) Type of infertility:

- Primary (you never had a pregnancy with your actually partner) □
- Secondary (you have already had at least one pregnancy with your actually partner) □

9) Origin of infertility: Me □ My partner □ Both of us □ Witchcraft □ Curse □ all □ No idea □

10) Source of pressure to get pregnant: Me □ My partner/husband □ My family □ My friends □ All of them □

11) Treatment orientation: Hospital □ Traditional healers □ Phytotherapist □ Church □ All □

12) Have you been diagnosed with a psychological disease caused by infertility? Yes □ No □

Section B: Evaluation of psychological health using GHQ-28

Please read the following carefully:

We would like to know in general, how you have been doing recently.

Be sure to answer all the questions by checking the answer that seems to you to correspond best to your feelings.

Please read carefully and thick the box that corresponds to your feelings.

Thanks for your help.

N	Questions/have you recently	Not at all	No more than usual	Rather more than usual	Much more the usual
1.	Been feeling perfectly well and in good health?				
2.	Been feeling in need of a good tonics?				
3.	Been feeling run down and out of sorts?				
4.	Been feeling ill?				
5.	Been getting any pain in your head?				
6.	Getting a feeling of tightness or pressure into your head?				
7.	Been having hot or cold spells?				

Continued

8. Lost much sleep over worries?
9. Had difficulty in staying asleep once you are awake?
10. Felt constantly under stress?
11. Been getting edgy and bad tempered?
12. Been panicky or scared for no good reason?
13. Found everything getting on-top of you?
14. Been feeling nervous all the time?
15. Been managing to keep yourself busy and occupied?
16. Been taking longer to do things?
17. Felt overall you were doing things well?
18. Been satisfied with the way you are carrying out your task?
19. Felt that you are playing a useful part in things?
20. Felt capable of making decisions about things?
21. Been able to enjoy your normal day to day activities?
22. Been thinking of yourself as a worthless person?
23. Felt that life is entirely hopeless?
24. Felt that life is not worth living?
25. Thought of the possibility that you may do away with yourself?
26. Found at times you couldn't do anything because you were very nervous?
27. Found yourself wishing you were dead and away from it all?
28. Found that the idea of taking your life kept coming into your mind?

SECTION C: Source of psychological support and coping strategies

Please read carefully and tick the box(es) that corresponds to you.

13) **Source of psychological support**

- Partner/husband □
- Family □
- Friends □
- Brother or sister-in-law □
- Psychologist □
- Infertility support group □
- All of them □
- None of them □

14) **Source of coping strategies**

- Prayer □
- Getting myself busy □
- Staying with children □
- Following a treatment □
- No strategies □

Questions assessing the psychological and social wellbeing of participants.

15) How did you feel when you found difficulty conceiving? Angry □ Disappointed □ Frustrated □ Sad □

16) Which aspect of your life does infertility affect? Joy □ Couple □ Mood change (i am easily irritable) □ My relationship with others (i prefer to isolate myself) □ My sleep □ None □

17) How do you feel at any time you meet a pregnant woman? Angry □ Sad □ Indifferent □

18) Do you think your life will be best with a child? Yes □ No □

19) What is your biggest fear if infertility persists? I don't think about it □ Died without leaving a descendent □ Lose my partner/husband □ None i have at least one □ To stay alone □

20) Do you sometimes think of killing yourself? Yes □ No □

21) Is your sexual life conditioned by the need of a child most of the time and not by pleasure? Yes □ No □

22) How do you feel about the failure of different treatments? Angry □ Desperate □ Disappointed □ Sad □ Indifferent □

23) Is your partner putting the blame on you for infertility? Yes □ No □

24) Has this problem ever created arguments in the couple? Yes □ No □

25) What is the biggest fear for the couple concerning this situation? Separation/divorce □ Take another wife □ Try to have children out of marriage □ None □

26) Is your partner having children out of marriage or relation? Yes □ No □

27) Do you feel guilty of not giving your husband/partner a child? Yes □ No □

28) Have you ever been insulted because of this situation? Yes □ No □

29) Do you feel embarrassed to spend time with your friends having children? Yes □ No □

30) How do you feel at any time you are being questioned about your situation? Angry □ Sad □ Embarrassed □ Indifferent □