

Bridging Supportive Care Gaps in Gynaecological Cancers: Findings from a Convergent Parallel Mixed Methods Study

Thungchanbeni Ezung ^{1*}, Hemam Jamuna Devi ², Raj Kumar Lenin Singh ³,
Anu Gauba ⁴ and Surajbala Soubam ⁵

¹ PhD Nursing Scholar & Nursing Faculty, Department of Nursing, Regional Institute of Medical Sciences, Imphal, Manipur. *Corresponding Author Email: beniaiims@gmail.com

² M.Sc. Nursing, Principal, Department of Nursing, Regional Institute of Medical Sciences, Imphal, Manipur, India.

³ MD, PhD, Department of Psychiatry Regional Institute of Medical Sciences, Imphal, Manipur, India.

⁴ PhD, Principal, Department of Nursing, Amity University, Gurugram, Haryana, India.

⁵ B.Sc. Nursing, Research Assistant, Regional Institute of Medical Sciences, Imphal, Manipur, India.

Abstract

Background: Gynaecological cancer patients face several challenges related to the diagnosis, treatment, side effects of drugs and survivorship. Identifying unmet needs among these patients is therefore important to provide a comprehensive supportive care services. Limited research exists on the unmet support care needs of Gynecological cancer patients in Northeast India. **Objective:** This study aimed to explore in-depth, the unmet supportive care needs of women with gynaecological cancers using a mixed-method approach. **Methodology:** A convergent parallel mixed method design was used, where the quantitative data was obtained using the “Supportive Care Needs Survey short form 34 (SCNS SF-34) in conjunction with demographic data on 72 participants recruited through purposive sampling. Qualitative data was obtained through in-depth interviews with fifteen participants using a semi-structured topic guide. Ethical clearance was obtained. Quantitative data was analysed using SPSS version 21 and the qualitative data was analysed based on Braun and Clark qualitative analysis framework using a qualitative analysis software; MAXQDA version 2021. **Results:** The most prevalent unmet supportive care needs among the survivors were in the domain of physical and daily living domain. Four main themes emerged from the qualitative data: Unmet; Physical, Psychological, Health Informational, Healthcare Service’s needs. **Conclusion:** Gynaecological cancer patients reveal substantial unmet supportive needs, emphasizing the importance of early screening and appropriate supportive intervention in every phase of the cancer journey trajectory to enhance their quality of life.

Keywords: Mixed Method, Qualitative, Cancer, Gynaecological, Unmet Supportive Care, Psychosocial Needs, Perceived Needs.

1. INTRODUCTION

Gynaecological cancers remain a major global health concern for women, particularly in India where they are the leading cause of cancer death.¹ In Manipur, North East India, the most common cancer in woman is cervical and ovarian cancer.² Gynaecological cancer diagnosis has a profound impact, not just on the patient but also their family and social life. Survivors often face a multitude of challenges throughout their journey, from diagnosis and treatment to post-treatment survivorship.³ These challenges can significantly affect their ability to manage daily life and increase feelings of distress, highlighting the critical role of supportive care.⁴

Supportive care encompasses a broad range of services, including physical, mental, educational, and even financial assistance. Its goal is to empower patients and their families to cope with the emotional and practical challenges associated with cancer survivorship.^{5,6}

However, a significant gap often exists between the supportive care a woman needs and the support she actually receives – these are known as unmet needs. Since supportive care should be tailored to individual needs, preferences, and values, a proper assessment is crucial to understand how best to meet the unique needs of each survivor.

While the prevalence of gynaecological cancers remains high, advancements in detection and treatment have led to improved prognoses and increased survival rates.^{7,8} This growing population of survivors has sparked a growing interest in research focused on how to best support their needs throughout the various stages of their cancer journey.⁹

There is a particular lack of research on the unmet supportive care needs of gynaecological cancer survivors in Northeast India, especially in the state of Manipur which is a region with limited healthcare resources. This study aimed to address this gap by utilizing a mixed-method approach to assess and identify the unmet needs of women with gynaecological cancers in this population. Understanding these unmet needs is vital for developing targeted healthcare interventions and ultimately improving the quality of life for this growing population of survivors.

2. METHODS

2.1 Study Design

A convergent parallel mixed method research design explored the unmet supportive care needs of women experiencing gynecological cancers. The quantitative phase attempts to explore the unmet support needs of patients with gynaecological cancer using the Supportive Care Needs Survey' (SCN SF34) self-report Questionnaire. In addition, a qualitative approach with an in-depth interview technique using a semi-structured topic guide further explored the women's needs and their wish to be assisted in meeting those needs.

2.2 Study Settings and Participants

Adult gynecological cancers who were above the age of 18 years and undergoing cancer therapy (surgery, chemotherapy, and radiation) at the Regional Institute of Medical Sciences Hospital, Imphal, Manipur, India.

2.3 Data Collection

2.3.1 Quantitative Data

Seventy-two participants meeting the eligibility criteria were recruited through purposive sampling after providing written informed consent and being assured of confidentiality. Sociodemographic and clinical data were collected using standardized questionnaires. To assess unmet supportive care needs, we utilized the Supportive Care Needs Survey (SCNS SF34).¹⁰ This 34-item self-reported questionnaire evaluates unmet needs in five domains: physical/daily living, psychological, patient care and support, sexuality, and health system and information. Participants rated their needs on a 5-point Likert scale (1 = no need/not applicable; 2 = need satisfied; 3 = low need; 4 = moderate need; 5 = high need). For analysis, scores of 1 and 2 were combined to represent "no unmet need," while scores of 3, 4, and 5 were grouped together as "unmet needs present."

2.3.2 Qualitative Data

Following informed written consent for interviews and permission for audio recording, fifteen participants were recruited for in-depth interviews using purposive sampling. A semi-structured interview guide, developed through an extensive literature review, guided the discussions. This guide was piloted beforehand to ensure its effectiveness and applicability.

It included open-ended questions like "What areas do you find challenging and require assistance with?" and "Did you receive adequate support from healthcare professionals?" The guide remained flexible, allowing prompts to encourage participants to elaborate on topics not initially mentioned. To ensure maximum variation in participant experiences, fifteen individuals with different cancer subtypes and stages were interviewed for 45-60 minutes each. The principal investigator, along with a field assistant, conducted all interviews. These were audio-recorded and transcribed concurrently with data collection. Data saturation, the point at which no new information emerges, was achieved after fifteen interviews.

2.4 Data Analysis

2.4.1 Quantitative Analysis

Descriptive statistics, including frequencies, percentages, and means, were used to describe the quantitative dataset. The analysis was performed using SPSS version 21.

2.4.2 Qualitative Analysis

All Interviews, conducted entirely in Manipuri, were audio-recorded and transcribed verbatim. To facilitate analysis, the transcripts were then translated into English. Data collection and analysis occurred concurrently. Braun & Clarke's six-phase framework for thematic analysis guided the qualitative analysis.¹¹

The researcher immersed herself in the data by repeatedly reviewing the transcripts. Line-by-line coding identified and labelled statements relevant to unmet needs. Similar codes were then grouped to develop themes, which were further refined and defined. MAXQDA 2022 software supported qualitative data management throughout this process.

To ensure rigor and trustworthiness, the study adhered to Lincoln and Guba's guidelines.¹² Credibility and confirmability were achieved through source and investigator triangulation, member checking, peer debriefing, and the researcher's reflexivity. Dependability was maintained by utilizing a single research assistant for interviews and verifying the accuracy of transcripts. Additionally, a detailed description of the data and research methods was provided to enhance the transferability of the study's findings.

Quantitative and qualitative data were analysed independently before being compared to identify any convergence or divergence in the results. These combined findings were then compared with existing literature.

2.5 Ethical Approval

Ethical clearance was obtained from Ethical Review Boards of the Regional Institute of Medical Sciences (A/206/REB/Prop (FP)/177/105/17/2022).

3. RESULTS

3.1 Quantitative Results

A total of seventy-two participants were recruited for the quantitative data. The majority of participants were aged between 40 and 50 years. Most participants were illiterate, unemployed, had low household incomes, lived more than 21 kilometers from the hospital, and were diagnosed with cervical cancer. (Details are given in table 1).

3.1.1 Sociodemographic Variables and Clinical Features of the Participants for Quantitative Phase.

Table 1: Sociodemographic Variables and Clinical Features of the Participants (quantitative). (N=72)

Socio Demographic and Medical Characteristics	N (%)
Age	
<=30 yrs	6(8.3)
30-40 yrs	5(6.9)
40-50 yrs	22(30.6)
50-60 yrs	19(26.4)
60-70 yrs	18(25.0)
>70 yrs	2(2.8)
Education	
Illiterate	27(37.5)
High School	22(30.6)
Higher Education	23(31.9)
Religion	
Hindu	43(59.7)
Muslim	12(16.7)
Christian	17(23.6)
Others	0(0.0)
Occupation	
House Wife	65(90.3)
Employee	6(8.3)
Retired	1(1.4)
Household income	
Rs <=10,000 pm	48(66.7)
Rs >10,000 pm	24(33.3)
Distance travelled for treatment (in kms)	
Nil	23(31.9)
1-10 kms	12(16.7)
11-20 kms	11(15.3)
21-50 kms	15(20.8)
>50 kms	11(15.3)
Time of Diagnostic (in months)	
<=12 months	31(43.1)
13- 36 months	29(40.3)
37-60 months	8(11.1)
> 50 months	4(5.6)
Type of Cancer	
Ovarian	21(29.2)
Uterine/Endometrial	6(8.3)
Cervical	33(45.8)
Vulval	3(4.2)
Others	9(12.5)
Co morbidities	
Yes	16(22.2)
No	56(77.8)

3.1.2 Unmet Supportive Care Needs (SCNSF34)

Needs assessed by SCNSF 34 showed greatest unmet support needs in Physical and daily living followed by psychological and sexual domain. (Details in Table.2).

Table 2: Domains of Supportive Care Needs Score. (n=72)

Domains	Mean	Std. Deviation
Physical and daily living needs	3.7±.96	
Psychological needs	3.54 ±1.02	
Sexual Needs	2.62±1.22	
Patient care and support needs	2.53±.76	
Health system and patient information	2.56±.77	
Overall Level of need	4.3 ±.92	

3.1.3 Prevalence of unmet support needs assessed using Supportive care Needs short form -34 (SCNSF34).

The items with the highest supportive care needs are lack and energy and tiredness, Feeling of sadness, Not being able to do things you used to do, Feeling down or depressed, Feeling unwell a lot of the time, Pain, Feelings about death and dying, Uncertainty about the future, Anxiety, Fears about cancer spreading and learning to feel in control of your situation were reported as highest unmet needs. (Details given in Table 3).

Table 3: Prevalence of Supportive Care Needs among Participants (No Need vs. Some Need) (n=72)

Domains	Items	No Need n (%)	Some Need n (%)
Physical	Lack of energy/tiredness	8(11.1)	64(88.9)
Physical	Not being able to do things you used to do	10 (13.9)	62(86.1)
Physical	Pain	11(15.3)	61(84.7)
Physical	Feeling unwell a lot of the time	11(15.3)	61(84.7)
Physical	Work around the home	15(20.8)	57(79.2)
Psychological	Feeling of sadness	9(12.5)	63(87.5)
Psychological	Feeling down or depressed	11(15.3)	61(84.7)
Psychological	Feelings about death and dying	12(16.7)	60(83.3)
Psychological	Anxiety	13(18.1)	59(81.9)
Psychological	Uncertainty about the future	13(18.1)	59(81.9)
Psychological	Fears about cancer spreading	14(19.4)	58(80.6)
Psychological	Learning to feel in control of your situation	15(20.8)	57(79.2)
Psychological	Worry that the results of treatment are beyond your control	18(25)	54(75)
Psychological	Concerns about the worries of those close to you	18(25)	54(75)
Psychological	Keeping a positive outlook	22(30.6)	50(69.4)
Sexual	Changes in sexual feelings	33(45.8)	39(54.2)
Sexual	Changes in your sexual feelings	34(47.2)	38(52.8)
Sexual	Being given information about sexual relationships	36(50)	36(50)
Patient care	Being given information (written, diagrams, drawings) about aspects of managing your illness and side-effects at home	34(47.2)	38(52.8)
Patient care	Being given written information about the important aspect of your care	36(50)	38(52.8)
Patient care	Being given explanations of those tests for which you would like explanations	39(54.2)	33(45.8)
Patient care	More choice about which cancer specialist you see	45(62.5)	27(37.5)
Patient care	More choice about which hospital you attend	45(62.5)	27(37.5)

Patient care	Hospital staff acknowledging, and showing sensitivity to your feelings and emotional needs	47(65.3)	25(34.7)
Patient care	Reassurance by medical staff that the way you feel is normal	48(66.7)	24(33.3)
Patient care	Hospital staff attending promptly to your physical needs	48(66.7)	24(33.3)
Health system	Having one member of hospital staff with whom you can talk to about all aspects of your condition, treatment and follow-up	20(27.8)	52(72.2)
Health system	Having access to professionalism counselling (eg, psychologist, social workers, counsellors, nurse specialist) if you, family or friends need it	25(34.7)	47(65.3)
Health system	Being informed about cancer which is under control or diminishing (that is remission)	35(48.6)	37(51.4)
Health system	Being inform about things you can do to help yourself to get well	35(48.6)	37(51.4)
Health system	Being adequately informed about the benefits and side-effect of treatments before you choose to have them	39(54.2)	33(45.8)
Health system	Being informed about your test result as soon as possible	41(56.9)	31(43.1)
Health system	Being treated in a hospital or clinic that is as physical pleasant as possible	48(66.7)	24(33.3)
Health system	Being treated like a person not just another case	50(69.4)	22(30.6)

3.2 Qualitative Data Results

3.2.1 Socio Demographic and Clinical Variables of Participants of Qualitative Data.

A total fifteen participants were recruited for the qualitative in-depth interviews. (The details are provided in Table 4.)

Table 4: Socio Demographic and Medical Characteristics of participants in Qualitative phase. (N=15)

Socio Demographic and Medical Characteristics	N (%)
Age	
<=30 yrs.	2(13.3)
30-40 yrs.	3(20.0)
40-50 yrs.	5(33.3)
50-60 yrs.	2(13.3)
60-70 yrs.	2(13.3)
>70 yrs.	1(6.7)
Education	
Illiterate	7(46.7)
High School	3(20.0)
Higher Education	5(33.3)
Religion	
Hindu	8(53.3)
Muslim	2(13.3)
Christian	5(33.3)
Others	0(0.0)
Occupation	
House Wife	8(53.3)
Employee	5(33.3)
Retired	2(13.3)
Household income	
Rs <=10,000 pm	9(60.0)
Rs >10,000 pm	6(40.0)

Distance travelled for treatment (in kms)	
Nil	
1-10 kms	3(20.0)
11-20 kms	4(26.7)
21-50 kms	7(46.7)
>50 kms	1(6.7)
Time of Diagnostic (in months)	
<=12 months	8(53.3)
13- 36 months	2(13.3)
37-60 months	4(26.7)
> 50 months	1(6.7)
Type of Cancer	
Ovarian	1(6.7)
Uterine/Endometrial	3(20.0)
Cervical	6(40.0)
Vulval	2(13.3)
Others	3(20.0)
Co morbidities	
Yes	5(33.3)
No	10(66.7)

3.3 Themes

Line-by-line coding of the interview transcripts yielded a total of 300 codes. These codes were then grouped into 13 subthemes, which were further organized into four main themes. Notably, data saturation was achieved after only fifteen interviews. To illustrate these themes, the results section presents selected quotes that best represent the subthemes, as shown in Table 5.

Table 5: Themes Derived from the Qualitative Data (N=15)

Theme	Subthemes:	Quotes
1. Unmet physical needs	1. Nutritional Challenges and Eating Difficulties	<i>'For four months, I couldn't eat. I vomit when I eat, that's how my health got worse.' Pt 4.</i>
		<i>I feel tasteless, even my favorite curry becomes tasteless. Pt.1.</i>
	2. Post-Treatment Weakness and Discomfort	<i>I became very weak. Taking chemo makes me very weak. Now I easily get sick.Pt.15</i>
		<i>I don't know I am so tired all the time. Pt.4.</i>
		<i>"I used to do household activities and marketing; I am unable to do it anymore. Now I have stopped going to the market. I can cook food now but am unable to go to the market anymore" (Pt.8).</i>
	3. Gastrointestinal Issues and Pain	<i>Before my operation was done, I suffered from a bloated stomach.Pt.8.</i>
		<i>Most painful things: pain is the most experienced... Pt.12.</i>
		<i>I am suffering from constipation, so that leaves me extremely uncomfortable all the time. Pt. 14</i>
2. Unmet Psychological Needs	1. Sadness and Emotional Turmoil	<i>'I am very sad. I will never be the same again'.pt 11.</i>
		<i>Sometimes, I feel very down and sometimes very strong. I often have mood swings. 15</i>
	2. Fear of Recurrence	<i>'Doctor told me that I have a high chance of getting cured. So, I felt a bit relieved but I am bleeding again, I am very worried it is back.' Pt.13.</i>
		<i>I suffer a lot, I struggle a lot but I motivate myself that If others are doing then why can't I, why can't we I believe I'll get well soon." Pt.11.</i>
	3. On being hopeful	

3.Unmet Health Informational Needs	1. Need for counsellor	<i>"It would be so good to have someone in the hospital who can guide us on our specific needs like diet, self-care, side effects of medicines, and moral support. If needed then I can give them money if they are available" (Pt. 9).</i>
	2. Diagnosis and Treatment Information Deficiency	<i>"I did not receive adequate information regarding the treatment and the very bad side effects. (Sad emotion). It will be very good if they tell us what we don't know before it goes wrong. So, I may not suffer this much if they informed me ahead." Pt 1</i>
	3. Diet and Nutritional Information Needs	<i>"I want to know the diet for cancer patients. I want to ask about what to eat and what not to eat. If I eat whatever I like, it may trigger and I may suffer more. So, I should know what to eat and what not to eat." Pt. 11.</i>
	4. Sexual Health Knowledge Gap	<i>"I want to have information about sex-related information in cancer patients by the doctor or nurse. For now, they don't give any information on it." Pt. 15.</i>
4.Unmet Healthcare Services	1. Distance of Hospital as a Challenge	<i>The problem is that the hospital is far from my house. So, most of the time I missed my appointment. Pt 2.</i>
	2. Delayed Investigation and Financial Challenges	<i>'Time spent on investigation, I think we wasted a lot of time in doing investigation here and there'.pt 12.</i>
		<i>'I'm really worried about having this illness and whether I can afford the treatment. Money is a big challenge for us. pt.2.</i>
	3. No Time to Ask Questions	<i>'There is no time. I wanted to narrate my problem but as the doctor was telling me what to do and what not to do so I didn't get any chance. Pt 6.</i>

3.3.1 Theme 1. Unmet Physical Needs

Participants shared the distressing experience of being unable to eat, resulting in vomiting, inability to enjoy their favourite foods due to loss of taste. The impact of chemotherapy on their ability to consume food is evident, making them weak and fatigued.

"For four months, I couldn't eat. I vomit when I eat, that's how my health got worse". Pt 4.

Post-treatment, participants expressed a significant decline in physical strength. Chemo-induced weakness and fatigue persist even after treatment cessation, contributing to an overall feeling of tiredness.

"I became very weak. Taking chemo makes me very weak. Now I easily get sick."Pt.15.

Various symptoms, such as bloated stomach, constipation and pain, both during treatment and in the surgical area, are highlighted as significant and persistent challenges. These disruptions further contribute to the overall physical distress experienced by individuals.

"Most painful things is the pain I experience".Pt.12. (details in Table 5)

3.3.2 Unmet Psychological Needs

Feelings of sadness and mood swings, feeling both down and strong at different times are described as impacting the emotional well-being of the participants.

"I am very sad. I will never be the same again". Pt 11.

Concerns about the cancer returning linger, contributing to ongoing worry and stress. Even when advised that certain treatments are no longer necessary, participants emphasize the importance of continued vigilance against the disease.

"Doctor told me that I have a high chance of getting cured. So, I felt a bit relieved but I am bleeding again, I am very worried it is back." Pt.13.

Participants, despite hardships, individuals motivate themselves, questioning the reasons behind their illness and finding the strength to persevere,

"Sometimes I suffer a lot, I struggle a lot but I motivate myself that if others are doing then why can't I, why can't we I believe I'll get well soon." Pt.11.

Many participants expressed loneliness, feeling of giving up whereas some continued to stay hopeful and positive that after the completion of the treatment, they can go back to their normal life.

3.3.3 Unmet Health Informational Needs

The theme addresses the unmet informational needs on the diagnosis, treatment plan and side effects of treatment, diet and nutrition. Participants expressed dissatisfaction with the information provided about their diagnosis and treatment plans. One participant felt that healthcare providers didn't adequately inform them about the severity of their condition.

"I did not receive adequate information regarding the treatment and the very bad side effects. (Sad emotion). It will be very good if they tell us what we don't know before it goes wrong. So, I may not suffer this much if they informed me ahead." Pt 1.

Participants expressed a need for clear information on diets suitable for cancer patients, indicating a concern about the impact of diet on their health.

"I want to know the diet for cancer patients. I want to ask about what to eat and what not to eat. If I eat whatever I like, it may trigger and I may suffer more. So, I should know what to eat and what not to eat." Pt. 11.

Participants expressed a desire for information about sexual health after cancer treatment.

"I want to have information about sex-related information in cancer patients by the doctor or nurse. For now, they don't give any information on it." Pt. 15

Participants emphasized the need for counsellors to offer guidance on specific issues such as diet, self-care, medication side effects, and moral support. They even expressed a willingness to pay for these services if they were available.

"It would be so good to have someone in the hospital who can guide us on our specific needs like diet, self-care, side effects of medicines, and moral support. If needed then I can give them money if they are available" (Pt. 9).

3.3.4 Theme 4.Unmet Health Care Service Needs

This theme addresses practical challenges participants face in accessing healthcare services, including issues of distance, delayed investigations, and lack of finances for treatment as one participant expressed that the long travelling distance between her homes and hospitals, led to missed appointments.

"The problem is that the hospital is far from my house. So, most of the time I missed my appointment." Pt 2.

Delays in investigations, financial challenges, and thoughts of giving up treatment due to money concerns were a concern expressed by the participants.

"I think that because we wasted lots of time in doing investigation here and there".Pt 12.

Most of the participants were weight down by the financial burden of cancer treatment and they expressed worry that, at some point of time in their treatment phase they might need to stop the treatment due to lack of money.

"I'm really worried about having this illness and whether I can afford the treatment. Money is a big challenge for us." Pt.2.

Participants express dissatisfaction with the limited time available for discussions with doctors during outpatient visits.

"There is no time! I wanted to narrate my problem but as the doctor was telling me what to do and what not to do so I didn't get any chance." Pt 6.

4. DISCUSSION

Our study aimed to identify the supportive care needs of women with gynaecological cancers in Manipur, India. Participants across both quantitative (SCNS-SF34) and qualitative (interviews) methods reported a diverse range of unmet needs. The SCNS-SF34 identified the highest unmet needs within the "Physical and Daily Living" domain, followed by "Psychological," "Sexuality," and "Health System Information" domains. Needs identified through in-depth interviews mirrored these categories, with themes emerging around "Physical Needs," "Psychological Needs," "Health Informational Needs," and "Healthcare Service Needs."

Focusing on the "Physical and Daily Living" domain, both quantitative and qualitative data revealed a significant burden of unmet needs. Exhaustion and fatigue were prevalent, with 88.9% of participants reporting "lack of energy/tiredness" and 84.7% experiencing "feeling unwell much of the time" on the SCNS-SF34. Interviews echoed these findings, with one participant stating, *"I am so tired all the time"* (Pt.4). The lingering effects of chemotherapy, particularly weakness and fatigue, were highlighted as contributors to this overall tiredness. Pain was another significant unmet need, affecting 84.7% of participants according to the SCNS-SF34. A participant expressed this burden by stating, *"Most painful things: pain is the most experienced..."* (Pt.12). These findings underscore the urgent need for tailored interventions to address pain and fatigue through survivorship care plans for gynaecological cancer survivors.

Furthermore, many participants struggled with daily activities and household tasks. The SCNS-SF34 indicated unmet needs in "inability to perform daily activities" (86.1%) and "household tasks" (79.2%). One participant shared the impact on their daily life: *"I used to do household activities and marketing; I am unable to do it anymore. Now I have stopped going to the market. I can cook food now but am unable to go to the market anymore"* (Pt.8).

These findings aligns with existing literature^{13,4,14} where participants identified fatigue, pain, and difficulty with daily activities as significant unmet needs among gynaecological cancer survivors.

In the Unmet psychological needs domain, the SCNS-SF34 data identified feelings of sadness (87.5%) and feeling down or depressed (84.7%) as the top unmet psychological needs. These findings align with the qualitative interviews, where participants described experiencing emotional turmoil, sadness, and mood swings. One participant described the emotional fluctuations: *"Sometimes, I feel very down and sometimes very strong. I often have mood swings"* (Pt.15). These emotional changes significantly impacted their overall well-being.

The SCNS-SF34 further revealed significant unmet needs related to anxieties about the future. Scores indicated concerns about death and dying (83.3%), uncertainty about the future (81.9%), anxiety (81.9%), and fear of cancer recurrence (80.6%). Concerns about the cancer returning emerged

as a prominent theme in the qualitative interviews, contributing to ongoing worry and stress. Some participants, even after being advised that certain treatments are no longer necessary, emphasized the importance of continued vigilance. For example, one participant stated, *"Doctor told me that I have a high chance of getting cured. So, I felt a bit relieved but I am bleeding again, I am very worried it is back."* (Pt.13).

These findings are consistent with several other studies worldwide.^{4 15, 7,9,14,16,17} where cancer patients identified fear of recurrence as a major unmet need affecting the mental and psychological well-being of cancer patients, regardless of cancer type. This highlights the importance of routine anxiety screening throughout all phases of the cancer treatment journey.

By identifying anxieties early, healthcare providers can intervene promptly with appropriate psychological support, reducing the risk of further complications and empowering survivors to manage their anxieties effectively.

Unmet Needs in Health Information and Support, the SCNS-SF34 data revealed findings where over two-thirds of participants (65.3%) reported a strong desire for access to professional counselling from psychologists, social workers, counsellors, or nurse specialists. Beyond counselling, the SCNS-SF34 scores (51.4%) indicated a need for information on self-care strategies for recovery. This desire was further emphasized by participants who expressed a need for guidance on managing their condition, including diet and medication side effects. As one participant stated, *"It would be so good to have someone in the hospital who can guide us on our specific needs like diet, self-care, side effects of medicines, and moral support. If needed then I can give them money if they are available"* (Pt. 9). Notably, some participants even expressed a willingness to pay for such services if available, highlighting the significance of this unmet need.

Furthermore, over half of the participants (51.4%) desired regular updates on their cancer status and whether it was under control. This suggests a potential information gap regarding disease progression and prognosis. Interviews revealed dissatisfaction with communication from healthcare providers. Participants felt they weren't adequately informed about the severity of their diagnosis and treatment plans. One participant's quote powerfully illustrates this: *"I did not receive adequate information regarding the treatment and the very bad side effects... It would be very good if they tell us what we don't know before it goes wrong..."* (Pt. 14). This findings resonates in agreement with various studies which reported, cancer patients greatest unmet need is their desire to receiving counselling.^{9,18,19} These findings highlight the need to assign counsellors to cancer units as part of the cancer care team to address communication gaps.

Dietary concerns also emerged as a major unmet needs. Some participants expressed a need for clear information on diets suitable for cancer patients, indicating a concern about the impact of diet on their health, *"I want to know the diet for cancer patients. I want to ask about what to eat and what not to eat. If I eat whatever I like, it may trigger and I may suffer more. So, I should know what to eat and what not to eat,"* Pt. 15. This highlighted the importance of clear information on suitable diets for cancer patients. Good nutrition can enhance immunocompetence in patients receiving radiation and chemotherapy, promoting better tolerance to treatment.⁹ Therefore including dietitian consultations in supportive care could address this need and promote better treatment tolerance and overall health outcomes

In the unmet sexuality domain, the quantitative (SCNSF34) reports highlighted major support needs, including information about sexual relationships (50%), changes in sexual relationship (52.8%), and changes in sexual feeling (54.2%). These findings were echoed in qualitative interviews, where participants expressed a clear need for post-treatment sexual health information. One participant stated this directly: *"I want to have information about sex-related issues in cancer*

patients from the doctor or nurse. Currently, they don't provide any information on it" (Pt. 15). This aligns with research findings from various regions of the world²⁰⁻²⁶. This body of evidence suggests a critical gap in support for gynaecological cancer survivors regarding their sexual health.

The potential consequences of unmet sexual health needs are concerning. Long-term sexual dysfunction can negatively impact marital intimacy and potentially lead to higher divorce rates.³ To improve overall well-being and address these unmet needs, supportive care should be expanded to include couple-oriented interventions on sex education and relational care.

In the unmet health care services domain, the SCNS-SF34 data provided valuable insights into unmet needs, the in-depth interviews offered a more nuanced understanding of the challenges participants faced in accessing healthcare services. A striking finding from the SCNS-SF34 data was that 72.2% of participants expressed a strong desire for a designated healthcare staff member to manage all aspects of their condition, including treatment and follow-up care. This highlights a potential gap in care coordination and the need for a patient-cantered approach.

The interviews revealed practical barriers to accessing healthcare services. The long distance between hospitals and participants' homes was a significant challenge, as exemplified by a participant who stated, *"The problem is that the hospital is far from my house. So, most of the time I missed my appointment."* Pt. 2. Strategies to improve accessibility, such as telehealth consultations or establishing satellite clinics in closer proximity to patients' residences, are crucial to address this unmet need.

Financial burden emerged as another major concern. Delays in investigations, as mentioned by one participant, *"Time spent on investigation, I think we wasted a lot of time in doing investigation here and there"*. Pt. 12, and the high cost of treatment caused anxiety and distress. One participant powerfully captured this sentiment: *"I'm really worried about having this illness and whether I can afford the treatment. Money is a big challenge for us."* (Pt. 2)

The financial burden of cancer treatment can be immense, often leading to difficult choices and jeopardizing a patient's well-being which can be exacerbated by the unavailability of cost-effective and timely treatment options. Several studies have shown that financial toxicity and unavailability of cost effective timely cancer treatment facilities increased patient distress.^{9,27,28}

Integrating financial counselling into supportive care services can equip patients with the knowledge and tools to make informed decisions about their treatment plan while managing the financial burden.

Strengths and limitations

This study stands out for being among the first to explore the needs of gynecological cancer patients in Manipur using a mixed methods approach. This approach combines quantitative data (SCNS-SF34 scores) with qualitative interviews (Pt. 15's experience), offering a richer picture of patient needs and the reasons behind them. It attempted to include all subtypes and stages of Gynecological cancer to maximize sample variation and enhance representativeness. However, the study's cross-sectional design limits its ability to capture how needs change over time, from diagnosis to survivorship. Future studies could address this by incorporating longitudinal qualitative interviews or a mixed-longitudinal design.

Implications for Practice

This study highlights the critical unmet supportive care needs of gynecological cancer patients in Manipur. Implementing routine assessments can identify these gaps and inform the development of a more robust support system. This system should prioritize enhanced communication channels

between patients, caregivers, and healthcare providers. Furthermore, ensuring readily available professional counselling services throughout the cancer journey would provide invaluable support for these patients. By prioritizing these interventions, a comprehensive and patient-centered supportive care system can be developed specifically tailored to this population's unmet needs.

5. CONCLUSION

Survivors of gynaecological cancer identified a high level of unmet support care needs. It is imperative to implement supportive care screening to ensure supportive care needs are identified and supportive care is tailored to meet each woman's unique unmet needs. Early screening and identification can help guide to address the unique support needs of each gynaecological cancer patient to improve patient care outcome.

Disclosures

Conflict of Interest: None

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