

Unmet Supportive Care Needs of Women with Gynecological Cancer in Manipur, North East India

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ABSTRACT

Background; Gynecological cancer significantly affects femininity, sexuality, fertility, physical and psychosocial relationships leading to impaired quality of life. There is a dearth of literature that identifies the unmet psychosocial supportive care needs of gynecological cancer patients in North East, India especially in Manipur. The study aims to explore the unmet supportive care needs of women with gynecological cancers and to determine correlates with demographic variables.

Methodology: A cross-sectional study using the "Supportive Care Needs Survey questionnaire (SCNS SF-34) in conjunction with demographic data was done on 72 participants recruited through purposive sampling. Ethical clearance was obtained. Data was analyzed with SPSS version 26.

Results: Physical and daily living were the domains with the highest unmet supportive needs. The top five items with highest unmet needs were lack of energy, feelings of sadness, not being able to do things they used to do, pain, feeling unwell and feeling depressed. Age, education, occupation, income, type of cancer, and comorbidities showed a significant difference in sexual and psychological unmet needs ($p < 0.05$).

Conclusion: Gynecological cancer patients reveal substantial unmet psychosocial needs, emphasizing the importance of early screening for targeted interventions that can enhance their quality of life.

Keywords: Gynecological cancer, psychosocial needs, supportive care, unmet needs, Cancer, perceived needs

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INTRODUCTION

Cancer remains a leading cause of death worldwide, significantly affecting life expectancy. GLOBACON's 2020 reported 19.3 million new cancer cases and almost 10.0 million cancer deaths.¹ The most commonly diagnosed cancer in women worldwide is breast cancer and cervix uteri, corpus uteri, ovary, vulva and vaginal.² In Eastern India, including Manipur, cervix uteri (9.5%) and ovarian cancer are among the most prevalent causes of death in women from gynaecological cancer.³ Gynaecological cancer poses significant challenges, deeply affecting a woman's life and her family dynamics. It impacts femininity, fertility, sexuality, physical and mental health, social relationships, and work-life balance, ultimately diminishing the overall quality of life.^{4,5}

Studies indicate that individuals diagnosed with gynaecological cancer often express unmet supportive care needs, related to emotional distress, fear of cancer recurrence, decision-making and practical issues, especially in the realm of health information.^{6,7} Supportive care encompasses a holistic, person-centred approach that addresses physical, psychological, and spiritual needs, recognizing gaps in healthcare provision, information delivery, and even aspects related to sexual functions.^{8,9} The unmet supportive care needs of gynaecological cancer patients vary and are individualized. Factors like age, gender, education, income, location, diagnosis, and marital status, recurrence correlate with the likelihood of unmet supportive needs.^{10,11}

As the population of cancer survivors grows, the demand for psychosocial support is expected to rise. Understanding these supportive care needs is crucial for strategic healthcare planning, assessing the effectiveness of interventions, and allocating resources appropriately.¹² There is a sparsity of literature exploring the unmet supportive care needs of women with gynecological cancer in Manipur. This study aims to explore the unmet supportive care needs of women with gynecological cancers and to find an association between demographic variables with identified unmet support needs.

METHODOLOGY

A descriptive cross-sectional design explored the unmet supportive care needs of women with gynecological cancers at the Regional Cancer Centre, Regional Institute of Medical Sciences Hospital, Imphal, Manipur. This site was chosen due to its coverage of all sixteen districts in Manipur, India, ensuring a diverse representation of women with various ethnic backgrounds and gynecological cancer types.

The Supportive Care Framework by Fitch recognizes that around 20% of cancer patients in healthcare encounter unmet needs.¹³ To estimate this 20% prevalence with a 95% confidence interval and a 10%

margin of error, a minimum sample size of 62 was calculated using the formula $n = z^2pq/d^2$, where $z = 1.96$, $p = 0.2$, $q = 1-p$, and $d = 0.1$.

The inclusion criteria consisted of females aged 18 and above, diagnosed with gynecological cancers, who underwent chemotherapy, radiation, surgery, or a combination of these therapies, and who can speak English or Manipuri. Based on the inclusion criteria, A total of seventy-two females were purposefully recruited for the study excluding those patients who were in the terminal phase of their illness. The study duration spanned nine months from January to November 2023. Participants were informed about the study's details, right to withdraw and confidentiality. Upon voluntary agreement, written informed consent was obtained and the study tool was administered.

The study tool consisted of a structured questionnaire on participants' sociodemographic details and disease characteristics. Information was verbally obtained from the participants, while the case file was referred only when participants could not recall the details of cancer type, stage and treatment therapy.

The unmet supportive care needs were assessed using a standardized tool: 'The Supportive Care Needs Survey-Short Form (SCNS-SF 34)'. This standardized tool gauges cancer patients' needs in five areas: physical/daily living (5 items), psychological (10 items), sexuality (3 items), patient care and support (5 items), and health system/information needs (10 items). Following the format of SCNS-SF 34, Participants were asked to rate their level of need for each item on a five-point Likert scale (1 = not applicable, 2 = satisfied, 3 = low need, 4 = moderate need, and 5 = high need. Values of 1 and 2 were rated as (No Need) and 3,4,5 as (Some need/unmet need). The tool demonstrated strong internal consistency, with Cronbach's alpha coefficients ranging from 0.87 to 0.96 across the domains.¹³

Ethical Clearance was obtained from the Ethical Review Boards of the Regional Institute of Medical Sciences (A/206/REB/comm (FP)/806/148/01/202) and permission was obtained from the concerned Head of the Department of Regional Cancer Center.

Statistical Analysis

The dataset was entered into an Excel sheet and analyzed using SPSS version 26. Demographic and clinical characteristics, along with the unmet supportive care needs data obtained through the SCN SF 34 survey, were analyzed using descriptive statistics such as frequency, percentage, and mean. The association between selected sociodemographic and medical characteristics of participants was assessed using Chi-square tests and one-way analysis of variance (ANOVA) to compare the mean scores across supportive care needs domains with a significance level set at $p < 0.05$.

RESULTS

Socio-demographic and disease-related characteristics of the respondents: Seventy-two participants were included in the study, the mean age of the participants 52 years (ranging from 22 to 82). The majority were illiterate (37.5%), Hindu (59.7%), and unemployed (90.3%), with a household income below 10,000 rupees per month. (details are given in Table 1).

Clinical characteristics of the participants: Cervical cancer was the most common diagnosis (45.8%), followed by ovarian cancer (29.2%). Around half of the participants were in the initial stages of cancer (1st: 31.9%, 2nd: 30.6%). Chemotherapy alone (48.6%) or in combination with radiation (43.1%) was the predominant treatment. (details are given in Table 2).

Domain-wise assessment of unmet psychosocial supportive needs: Nearly all participants (91.7%) indicated unmet supportive care needs in all domain.

Table 1: Socio-demographic characteristics of the participants (n=72)

Socio-demographic characteristics	Participants (%)
Age (Min-Max)	52.22 (22-82)
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)
Occupation	
House Wife	65 (90.3)
Employee	6 (8.3)
Household income	
Rs <=10,000 pm	48 (66.7)
Rs >10,000 pm	24 (33.3)
Primary caregiver	
Spouse	23(31.9)
Siblings	46(63.9)
Relatives	3(4.2)
Cohabitation status	
Married	58(80.6)
Divorced	7(9.7)
Single	7(9.7)
In relationship	0(0.0)
No of children	
Nil	8 (12.3)
2-Jan	23(35.4)
4-Mar	20(30.8)
6-May	14(21.5)
Partner support	
Not Supportive	11(19.0)
Somewhat Supportive	5(8.6)
Quite Supportive	8(13.8)
Extremely Supportive	34(58.6)
Living with/without spouse	
Yes	44(61.1)
No	28(38.9)

Note: Data are presented as No (%) unless otherwise noted

The highest needs were reported in Physical and Daily Living (84.7%) and Psychological (81.9%) domains. Health System and Patient Information domains showed comparable levels of unmet needs (54.2%). Conversely, the domain with the fewest unmet needs was Patient care and support (34.7%). (Table 3).

Unmet psychosocial supportive care needs: The items with the highest unmet supportive care needs were from physical daily living and psychological domains. The top ten items with the highest unmet needs were Lack of energy/tiredness (88.90%), Feeling of sadness (87.50%), Not being able to do things you used to do (86.10%), Pain (84.70%), Feeling unwell a lot of the time (84.70%), Feeling down or depressed (84.70%), Feelings about death and dying (83.30%), Anxiety (81.90%), Uncertainty about the future (81.90%) and Fears about cancer spreading (80.60%). (Table 4). The least unmet needs were in the patient care and support, as well as the health system and information domains.

Table 2: Clinical characteristics of the participants (n=72)

Characteristics	Participants (%)
Type of cancer	
Ovarian	21(29.2)
Uterine/Endometrial	6 (8.3)
Cervical	33 (45.8)
Vulval & others	12(16.7%)
Stage of Cancer	
1st Stage	23 (31.9)
2nd Stage	22 (30.6)
3rd Stage	15(20.8)
4th Stage	12 (16.7)
Type of Therapy	
Chemotherapy	35(48.6)
Radio therapy	6(8.3)
Both	31(43.1)
Surgery	
Yes	24 (33.3)
No	48 (66.7)
Comorbidities	
Yes	16 (22.2)
No	56 (77.8)
Re-occurrence	
Yes	19(26.4)
No	53 (73.6)

Note: Data are presented as No (%) unless otherwise noted

Table 3: Domains with the highest unmet supportive care needs

Domains	Unmet Need f (%)
Physical and daily living	61(84.7)
Psychological	59 (81.9)
Sexuality	39(54.2)
Health system & patient information	39(54.2)
Patient care and support	25(34.7)
Overall Level of need	66(91.7)

Note: Data are presented as No (%) unless otherwise noted.

These included aspects like; Being treated like a person rather than a case (30.60%), Reassurance by medical staff regarding normal feelings (33.30%), Prompt attention to physical needs by hospital staff (33.30%), Hospital environment aiming for physical comfort (33.30%), Acknowledgment and sensitivity by hospital staff to emotional needs (34.70%), Choice in selecting cancer specialists (37.50%), Choosing the preferred hospital (37.50%), Immediate test result notification (43.10%), Explanation of desired test results (45.80%), and Information on treatment benefits and side effects before choosing them (45.80%). (Table 5).

Association between domains and sociodemographic characteristics: In the studied domains—Physical and daily living, Psychological, Patient care and support, Health System, and patient information—no notable differences were found across various age groups or education levels ($p>0.05$). However, concerning Sexuality needs, the age group of 30-40 showed a significant difference ($p=0.027$), indicating higher unmet needs in this domain. Similarly, a significant difference emerged in the psychological domain ($p=0.026$) among different education levels, where lower educational levels correlated with higher unmet psychological needs. No noteworthy differences were observed among different religions or occupation levels ($p>0.05$) across all domains, however, in the psychological domain ($p=0.049$), among various occupation levels, house-

wives or unemployed individuals displayed a higher level of unmet psychological needs. Survivors with a household income of less than Rs.10,000 per month reported higher levels of needs in all domains except in the sexual domain ($p=0.290$). There is a significant difference among different household income levels on Physical and daily living ($p=0.012^*$), Psychological domain (0.002^*), Patient care and support ($p=0.003^*$) and Health system and patient information ($p=0.004^*$). (Table 6)

Cohabitation status showed significance in Physical and daily living ($p=0.048$) as well as Sexual domains($p=0.010$), indicating higher needs in these areas. Conversely, Psychological, Patient care and support, Health system and patient information domains did not show significant differences based on Cohabitation status. ($p=>0.05$). Regarding the number of children, living with or without a spouse, and primary caregivers, there were no significant differences found in most domains except in Physical and daily living ($p=0.008$), where siblings as primary caregivers exhibited higher needs in the Physical and daily living domain. Partner support significantly impacted the Sexual domain, demonstrating higher needs among survivors with supportive partners($p=0.037$). However, no substantial differences were observed in other domains like Physical and daily living, Psychological, Patient care and support, and Health system and patient information based on partner support. (Table 7)

Table 4: Top ten items with the highest unmet supportive care needs

Rank	Item	Domain	Percentage
1	Lack of energy/tiredness	Physical and daily living	88.90%
2	Feeling of sadness	Psychological	87.50%
3	Not being able to do things you used to do	Physical and daily living	86.10%
4	Pain	Physical and daily living	84.70%
5	Feeling unwell a lot of the time	Physical and daily living	84.70%
6	Feeling down or depressed	Psychological	84.70%
7	Feelings about death and dying	Psychological	83.30%
8	Anxiety	Psychological	81.90%
9	Uncertainty about the future	Psychological	81.90%
10	Fears about cancer spreading	Psychological	80.60%

Note: Data are presented as No (%) unless otherwise noted.

Table 5: Items with the lowest unmet supportive care needs

Rank	Domain	Item	Percentage
1		Being treated like a person not just another case	HPI 30.60%
2		Reassurance by medical staff that the way you feel is normal	PCS 33.30%
3		Hospital staff attending promptly to your physical needs	PCS 33.30%
4		Being treated in a hospital or clinic that is as physical pleasant as possible	HPI 33.30%
5		Hospital staff acknowledging and showing sensitivity to your feelings and emotional needs	PCS 34.70%
6		More choice about which cancer specialist you see	PCS 37.50%
7		More choice about which hospital you attend	PCS 37.50%
8		Being informed about your test result as soon as possible	HPI 43.10%
9		Being given explanations of those tests for which you would like explanations	PCS 45.80%
10		Being adequately informed about the benefits and side- effect of treatments before you choose to have them	HPI 45.80%

Note: Data are presented as No (%) unless otherwise noted. Abbreviation: PDL, Physical and daily living needs level. PSY, Psychological needs level. SEX, Sexuality. HPI, Health system and patient information level, PCS, Patient care and support

Table 6: Mean supportive scores across domains by sociodemographic variables

Characteristics	PDL	P	PSY	P	SEX	P	PCS	P	HIF	P
Age										
<=30 yrs	4.07±0.45		4.00±1.07		3.61±1.02		2.47±0.72	0.568	3.17±0.31	0.349
30-40 yrs	3.76±1.20		2.86±0.81	0.553	3.80±1.39		2.12±0.18		2.49±0.97	
40-50 yrs	3.65±0.76	0.946	3.67±1.00		2.58±1.25	*	2.66±0.86		2.64±0.81	
50-60 yrs	3.76±1.18		3.56±1.25		2.12±1.01	0.027	2.44±0.72		2.36±0.69	
60-70 yrs	3.61±1.09		3.43±0.86		2.50±1.19		2.53±0.81		2.49±0.87	
>70 yrs	3.50±0.14		3.35±1.02		3.00±0.00		3.20±0.28		2.91±0.13	
Education										
Illiterate	3.93±0.74	0.329	3.96±0.74	*	2.36±1.02	0.363	2.70±0.81	0.315	2.69±0.70	0.402
High School	3.61±1.09		3.24±1.21	0.026	2.73±1.36		2.38±0.76		2.39±0.81	
Higher Education	3.55±1.06		3.35±1.00		2.83±1.31		2.48±0.68		2.60±0.82	
Religion										
Hindu	3.64±0.96	0.615	3.52±1.06	0.901	2.59±1.20	0.254	2.54±0.76	0.650	2.62±0.82	0.768
Muslim	3.95±0.91		3.48±0.93		3.11±1.37		2.37±0.50		2.52±0.78	
Christian	3.72±1.02		3.64±1.04		2.35±1.14		2.64±0.90		2.47±0.67	
Occupation										
Unemployed	3.76±0.95	0.427	3.59±0.98	*	2.68±1.21	0.312	2.54±0.71	0.632	2.61±0.73	0.238
Employee	3.23±1.12		3.42±1.18	0.049	2.28±1.37		2.53±1.26		2.38±1.19	
Household income										
Rs <=10,000 pm	3.91±0.75	*	3.80±0.93	*	2.73±1.21	0.290	2.72±0.79	*	2.75±0.75	*
Rs >10,000 pm	3.31±1.21	0.012	3.03±1.02	0.002	2.40±1.26		2.17±0.52	0.003	2.20±0.70	0.004

Abbreviation: PDL, Physical and daily living needs level. PSY, Psychological needs level. SEX, Sexuality. HPI, Health system and patient information level, PCS, Patient care and support. * Denotes significant p-value <0.05.

Table 7: Mean supportive scores across domains by sociodemographic variables

Variables	PDL	P value	PSY	P value	SEX	P value	PCS	P value	HIF	P value
Cohabitation status										
Married	3.57±0.99	*0.048	3.44±1.02	0.136	2.73±1.18	*0.010	2.50±0.72	0.364	2.52±0.77	0.245
Divorced	4.23±0.51		4.21±0.35		3.00±1.43		2.91±1.06		3.04±0.73	
Single	4.31±0.63		3.77±1.29		1.33±0.61		2.40±0.77		2.48±0.80	
No of children										
Nil	3.78±1.09	0.968	4.08±0.77	0.406	2.71±1.31	0.407	2.73±1.05	0.610	2.88±0.87	0.615
1-2	3.65±0.86		3.49±0.99		3.09±1.04		2.66±0.84		2.62±0.71	
3-4	3.57±1.19		3.44±1.02		2.62±1.42		2.39±0.60		2.45±0.81	
5-6	3.66±0.83		3.36±1.10		2.45±0.99		2.49±0.68		2.53±0.81	
Living with/without spouse										
Yes	3.67±0.97	0.697	3.53±0.98	0.860	2.91±1.10	*0.011	2.53±0.72	0.933	2.59±0.75	0.750
No	3.76±0.96		3.57±1.11		2.17±1.29		2.54±0.83		2.53±0.83	
Primary caregiver										
Spouse	3.57±0.97	*0.008	3.35±1.11	0.073	2.94±1.28	0.296	2.48±0.81	0.914	2.61±0.88	0.959
Siblings	3.87±0.88		3.71±0.91		2.49±1.16		2.56±0.73		2.55±0.70	
Relatives	2.20±0.87		2.50±1.54		2.22±1.84		2.60±1.03		2.55±1.28	
Partner support										
Not Supportive	3.38±1.06	0.558	3.05±1.02	0.343	1.88±0.83	*0.037	2.45±0.78	0.268	2.20±0.83	0.431
Somewhat Supportive	3.52±1.14		3.48±0.88		2.47±0.96		2.76±0.72		2.80±0.84	
Quite Supportive	4.03±0.53		3.93±0.68		3.17±0.69		2.90±0.68		2.63±0.63	
Extremely Supportive	3.54±1.04		3.44±1.09		2.94±1.27		2.39±0.69		2.56±0.77	

Abbreviation: PDL, Physical and daily living needs level. PSY, Psychological needs level. SEX, Sexuality. HPI, Health system and patient information level, PCS, Patient care and support. * Denotes significant p-value <0.05

Association between domains and clinical characteristics: Among the different variables studied, a significant difference was noted in Sexual Needs concerning the type of cancer ($p=0.017$) and comorbidities ($p=0.031$). Among the different types of cancer, participants with uterine or endometrial cancer reported higher levels of unmet sexual needs. Patients without comorbidities reported higher levels of unmet sexual needs. Regarding the Stage of Cancer and Surgery, no significant differences were found

across various domains, implying that these factors did not significantly impact the level of need in Physical and daily living, Psychological, Sexual Needs, Patient care and support, and Health system and patient information. According to the Type of Therapy, there is a significant difference in the Physical and daily living domain ($p=0.048$) where survivors who received combined radiation and chemotherapy showed higher mean scores in the Physical and daily living domain.

Table 8: Mean supportive scores across domains by clinical characteristics

Characteristics	PDL	P	PSY	P	SEX	P	PCS	P	HIF	P
Type of cancer										
Ovarian	3.73±1.01	0.817	3.55±1.04	0.182	2.48±1.13	*0.017	2.42±0.62	0.083	2.41±0.77	0.638
Uterine/Endometrial	4.07±0.33		4.23±0.44		4.22±0.93		2.80±0.74		2.80±0.46	
Cervical	3.72±0.97		3.61±0.92		2.51±1.19		2.73±0.85		2.68±0.81	
Vulval	3.47±1.62		3.23±1.16		2.67±1.53		2.27±0.80		2.48±0.91	
Others	3.47±0.99		2.94±1.38		2.30±1.09		2.00±0.41		2.40±0.81	
Co morbidities										
Yes	3.50±1.16	0.330	3.34±1.16	0.363	2.04±1.19	*0.031	2.68±0.92	0.403	2.38±0.96	0.260
No	3.77±0.90		3.60±0.98		2.79±1.19		2.49±0.71		2.63±0.71	
Stage of Cancer										
1st Stage	3.64±1.10	0.475	3.40±1.30	0.368	2.62±1.51	0.792	2.29±0.62	0.313	2.64±0.87	0.878
2nd Stage	3.95±0.86		3.85±0.76		2.80±1.28		2.62±0.87		2.60±0.73	
3rd Stage	3.69±0.84		3.30±1.00		2.56±0.99		2.68±0.86		2.44±0.74	
4th Stage	3.42±1.02		3.57±0.84		2.36±0.80		2.67±0.60		2.54±0.76	
Surgery										
Yes	3.78±1.06	0.643	3.57±0.97	0.878	2.47±1.10	0.472	2.58±0.74	0.697	2.41±0.64	0.230
No	3.67±0.92		3.53±1.06		2.69±1.29		2.51±0.77		2.65±0.83	
Type of therapy										
Chemotherapy	3.70±0.92	*0.048	3.58±1.09	0.806	2.45±1.24	0.117	2.44±0.68	0.112	2.55±0.82	0.462
Radiotherapy	2.83±1.21		3.28±1.30		2.00±1.05		2.10±0.77		2.23±0.65	
Both	3.88±0.89		3.55±0.91		2.94±1.19		2.72±0.81		2.66±0.78	
Reoccurrence										
Yes	4.15±0.80	*0.019	3.62±0.82	0.726	2.68±1.27	0.793	2.44±0.52	0.547	2.38±0.63	0.226
No	3.55±0.97		3.52±1.09		2.60±1.22		2.57±0.83		2.64±0.81	

Abbreviation: PDL, Physical and daily living needs level. PSY, Psychological needs level. SEX, Sexuality. HPI, Health system and patient information level, PCS, Patient care and support. * Denotes significant p-value <0.05

Moreover, the reoccurrence of cancer significantly impacted the Physical and daily living domain but did not influence other factors such as Psychological, Sexual, Patient care and support, Health system and patient information (Table 8)

DISCUSSION

Prevalence of unmet needs in cancer patients

This study, the first of its kind in Manipur, North East, India, offers valuable insights into the unmet supportive care needs among women diagnosed with gynaecological cancer. It underscores the prevalence of unmet supportive care needs, with 96% of women reporting high-level unmet needs across domains, these findings are consistent with the observations made by Paterson et al.⁵ Gebresillassie et al.¹⁴ and Nasution et al.¹⁵

The domains with the highest reported unmet needs were Physical and Daily Living (84.7%) and Psychological (81.9%), followed by Sexual Health System and Patient Information (54.2%), and Patient Care and Support (34.7%). Previous studies by Bell et al.¹⁶ indicated similar findings. This trend was echoed in studies by Kadra vello et al.¹⁷ Kim et al.¹⁸ and Sanders et al.¹⁹ focusing on lung cancer, breast cancer, and ovarian cancer patients, respectively. Additionally, a systematic review by Roseleur et al.²⁰ on the prevalence of unmet supportive care needs in Australian cancer patients also highlighted physical and daily living needs as the most prevalent. However

contrary to similar studies conducted in countries such as Australia and Thailand, as well as the outcomes of systematic reviews by Williams et al.⁸ Unjai et al.²¹ reported the highest unmet needs in Health Systems and Patient Information.

The top two unmet items reported were Lack of energy/tiredness (88.90%) and the inability to engage in previous activities (86.10%) within the physical and daily living domain. (Table 3). These findings might be strongly correlated with the socioeconomic status of the majority of the patients. Given that many patients belonged to lower socioeconomic backgrounds (Table 1), their ability to work and contribute financially became restricted due to constant fatigue. Consequently, this placed additional strain on financially burdened families.

Another key finding in this study was the prevalence of unmet psychological needs among participants, revealing a significant gap in this area. Notably, unmet needs regarding persistent feelings of sadness (87.50%), depression (84.70%), thoughts about death and dying (83.30%), anxiety (81.90%), uncertainty about the future (81.90%), and fears of cancer spreading (80.60%) emerged as prominent unmet supportive care needs within the psychological domain. (Table 4).

These findings resonate with previous research that consistently highlights widespread unmet psychological needs among cancer patients. This underscores the critical importance of addressing these psychological needs when caring for gynaecological cancer patients. As advancements in psych-oncology con-

tinue, they are anticipated to play a pivotal role in meeting the psychological needs of cancer patients in the future.^{4,22}

The domain with the third highest unmet needs was the sexual domain, these findings align with analogous findings in developed countries by Pernelle et al.²³ Akeflo et al.²⁴ Alananzeh et al.²⁵ underscoring significant sexual dysfunction and distress leading to moderate to severe depression among affected couples. Insufficient knowledge regarding the impact of cancer on sexual aspects like desire, arousal, misconceptions, and apprehensions about resuming sexual activity post-treatment contributes to unmet sexual needs in this demographic. This study emphasizes the critical role of psychosexual education in the comprehensive care of gynaecological cancer patients.

Nevertheless, this finding is not in agreement with several studies conducted in such as Nigeria, Thailand, Indonesia and Iran by Fatiregun O et al.²² Unjai et al.²¹ Afiyanti et al.²⁶ Amiri et al.²⁷ where they reported sexual domain as domain with the most met needs. It's plausible to consider that sexual needs are adequately addressed; however, an alternative explanation might be associated with a stigma surrounding open discussions about sexual issues or the perceived prioritization of other domains over sexual needs within this specific group of patients. Interestingly, despite a notably low number of patients reporting unmet supportive care needs in the sexual domain, reports by Afiyanti et al.²⁶ highlighted that unmet sexual need was found to be the strongest predictor of the quality of life in terms of functioning and overall quality of life in gynaecological cancer patients.

Although in this study, the health information domain was ranked third in the order of magnitude of unmet needs, the difference between the top two domains (physical and daily living and psychological) on a scale is usually very little. (Table 3) The high prevalence of unmet needs in the health system and information domain, as highlighted in this study, resonates with the findings of Roseleur et al.²⁰ where individuals diagnosed with gynecological cancers demonstrated substantial health system informational needs compared to other cancer types. These findings resonate with the findings of Chua et al.²⁸ Lisy et al.²⁹ Gebresillassie et al.¹⁴ Sun et al.³⁰

One of the noteworthy findings of this study is the notable fulfilment of needs within the patient care and support domain, with 65.3% of patients reporting met needs. (Table 5) These included preferences for selecting cancer specialists or hospitals, receiving emotional reassurance from medical staff, prompt attention to physical needs, and sensitive acknowledgement of emotional states by hospital staff. Research has consistently highlighted the necessity for comprehensive, long-term care support for gynecological cancer patients, involving family, peer, and societal support. The absence of support from

healthcare providers, families, and the broader community can significantly impact the well-being of these patients Dewi et al.⁷ Kim et al.³¹

Associations between demographic data and supportive care needs

Literature has shown evidence that socio-demographic and clinical factors influence the patterns of unmet needs perceived and expressed by cancer patients worldwide. In this study, age and education levels, occupation, income, type of cancer, comorbidities, and living with a spouse and having a supportive partner showed a significant difference in sexual and psychological unmet needs ($p < 0.05$). (Table 6&7). The type of therapy and reoccurrence have a significant difference in physical and daily living and patient support domain. (Table 8) However, variables such as religion, stage of cancer, surgery, and presence of children, had no significant difference in the level of unmet support needs in any domain. (Table 6.)

Of the women surveyed, younger age ($p < 0.027$), showed higher unmet support needs in the sexual domain though age had no significant difference in other domains, this finding is in agreement with several other study findings by Williams et al.⁸ Okediji et al.³² Dhakal et al.⁶ which reported age as a major predictor of supportive care needs with younger patients reporting higher unmet support needs in psychological and sexual domains. In addition to age, type of cancer; Uterine ($P < 0.017$), comorbidities ($P < 0.031$), living with a spouse ($p < 0.011$) and having a supportive spouse ($p < 0.037$) reported higher unmet needs in the sexual domain. These findings are supported by previous studies which reported patients who were married have greater unmet needs in the domain of sexuality Kim et al.¹⁰ Okediji et al.³² In the type of cancer, uterine cancer ($P < 0.017$), was found to have higher sexual unmet needs which are not similar to the findings of Fisher et al.³³ Dhakal et al.⁶ who reported the highest unmet sexual needs in ovarian cancer. (Table 6&7)

The high level of unmet needs in psychological domain is associated unemployment ($p < 0.049$), lower education levels ($p < 0.027$), and reduced household income ($< 10,000$ per month, $p < 0.002$). These findings align with similar outcomes from various studies, including Okediji et al.³² and Fong EL et al.³⁴ which also identified these factors contributing to heightened unmet supportive care needs. However, it's worth noting that Dhakal et al.⁶ reported that education did not exhibit any association with unmet support care needs. (Table 6)

Notably, variables such as religion and surgery showed no impact on the perceived level of need across any supportive care domain which is in agreement with the findings of Fatiregun O et al.²² Interestingly, in this study, cancer stage did not exhibit significance in any domain, contradicting findings from Molassiotis et al.³⁵ and Amal al Omari et al.² where late-stage cancer was associated with higher

unmet needs. Additionally, the number of children did not significantly differ across any of the five domains, opposing Afrooz et al.⁹ findings, which indicated that breast cancer patients with children tended to report fewer unmet needs due to the support provided by children, in line with the notion that a greater number of children may offer increased social support Walton et al.³⁶Seyedrasooli et al.³⁷ The findings from this study reveal that the type of therapy, reoccurrence significantly affect the physical and daily living and patient care and support domains. (Table 8). These results align with Okediji et al.³²and Beesley et al.³⁸Dewi et al.⁷where women with recurrent cancer indicated higher levels of care needs across all domains compared to those with a primary diagnosis.

The findings in the current study have important implications for the care of patients with Gynecological cancers. It provides evidence showing the varying levels of unmet care needs across domains in patients with Gynecological cancers in Manipur, North East India. It establishes a major gap in physical and daily living needs and psychological unmet needs providing a direction for caregivers and administrators to liaise with policymakers and decision-makers to mend the gaps.

Implications of the study

The implementation of routine screening may help identify patients who require a high level of supportive needs from the physician or for referral to supportive services. This screening should be from the initial commencement of care and throughout the course of treatment, and survivorship. Patients are often cognizant of the gaps in their care and have a clear understanding of where they seek assistance.³²Thus, assessing these gaps through a reliable, valid, and standardized tool is crucial for delivering optimal cancer care.

Findings from this study implicate that HCPs should provide supportive care congruent with the unmet needs, preferences, and priorities of gynecological cancer patients through active two-way communication with patients as well as interdisciplinary collaboration, which may optimize patient outcomes and resources allocation. Healthcare providers need sensitization to effectively support patients dealing with significant psychosocial issues. This involves training in communication skills, emphasizing active listening, and empathetic responses, using open-ended questions, and clarifying patients' perceptions regarding illness concerns. Addressing unsatisfactory supportive care needs in the health information domain requires these approaches.

Supportive services are crucial for caregivers in cancer care, especially considering caregivers' lack of formal training hence education programs that focus on empowering caregivers should be made accessible through targeted family education initiatives.

To address these unmet supportive care needs, collaboration among stakeholders including clinicians, allied health care providers, social workers, cancer support groups, family, friends, and caregivers is crucial. This collective effort can prevent the deterioration of patients' mental health. Healthcare providers not only need to identify these unmet needs but also require tailored intervention strategies to effectively address them. The patient should remain the focal point of care, and every endeavor should be made to enhance their quality of life despite the cancer diagnosis.

STRONG POINTS OF THE STUDY

The study was the first of its kind to be conducted in northeast India to assess the unmet psychosocial supportive care needs thus shedding light on the prevalence of unmet psychosocial needs of gynaecological cancer patients. Additionally, the study's inclusivity across all subtypes and stages of gynaecological cancer provided a holistic perspective on the spectrum of unmet needs within this demographic."

LIMITATIONS

This is a cross-sectional study therefore cannot analyse how patients' concerns change over time across the disease trajectory. Self-report can be subject to self-report bias, The study's scope was confined to a small group of women chosen through purposive sampling, thereby making it primarily exploratory in nature.

CONCLUSION

In summary, this study sheds light on the unmet supportive needs of gynecological cancer patients, highlighting ongoing challenges in delivering personalized care despite dedicated efforts by healthcare professionals. The findings underscore the pivotal role healthcare providers play in providing crucial information and support to help patients navigate the physical and psychological impacts of cancer diagnosis and treatment. The study emphasizes the importance of considering demographic and clinical characteristics when assessing patients' needs in cancer care, as these factors influence patterns of unmet supportive care needs. Acknowledging the limitations imposed by time and resource constraints in clinical settings, the study advocates for addressing these gaps through targeted education and skill development initiatives for healthcare professionals.

RECOMMENDATIONS

Further research on unmet supportive care needs should be comprehensively approached utilizing

mixed-method research designs from the perspectives of patients, caregivers, and healthcare providers. Longitudinal studies would provide insights into the trajectory of cognitive concerns over the course of cancer care.

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