

RESEARCH COMMUNICATION

Symptomatology of Gynecological Malignancies: Experiences in the Gynecology Out-Patient Clinic of a Tertiary Care Hospital in Kolkata, India

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Abstract

Background: This cross-sectional observational study was undertaken in a gynecology out-patient clinic to identify the symptoms suggestive of gynecological malignancies followed by histopathological confirmation of their diagnoses and to determine the proportion of the histopathologically confirmed cases specific to sites. **Methods:** In a gynecology out-patient clinic in Kolkata, India, patients with symptoms suggestive of gynecological malignancies were screened to identify possible cancer cases. Diagnoses were confirmed by histopathology. One hundred thirteen patients with histopathologically confirmed gynecological malignancies were interviewed further. **Results:** This study shows that 5.3% of the overall outpatients or nearly one-fourth (23.7%) of the patients with the symptoms suggestive of gynecological malignancies was histopathologically confirmed as having gynecological malignancies. Most of the patients (87.0%) with the symptoms suggestive of gynecological malignancies reported excessive, offensive with or without blood stained vaginal discharge, followed by irregular, heavy or prolonged vaginal bleeding (61.4%). The commonest histopathologically confirmed gynecological malignancy was cervical cancer (61.9%), followed by ovarian cancer (23.9%). **Conclusions:** This study highlights the need to increase the awareness about the symptoms of gynecological malignancies among women and the community. Health care personnel have a major role to identify the warning symptoms early for further investigation of the possible cases of gynecological malignancies.

Keywords: Symptomatology - screening - gynecological malignancies - women

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Introduction

Gynecological cancers are a group of different malignancies of the female reproductive system, which include cancers of the ovary, cervix, body of the uterus, vulva and vagina (Department of Health, Social Services and Public Safety, Northern Ireland, 2002; Senate Community Affairs References Committee, Commonwealth of Australia, 2006). Gynecological malignancies also include gestational trophoblastic neoplasia (GTN) (Dutta, 2003).

Gynecological malignancies continue to be a major cause of morbidity as well as mortality in women worldwide (Siyal et al., 1999). Unfortunately, some cancers seem to be on the increase. Over the years, irrespective of social class, the number of gynecological cancers is increasing, with more cases at the younger age in India (Chhabra et al., 2002). In most of the developing countries, including India, carcinoma of the cervix is a major public health problem (Department of Health, Social Services and Public Safety, Northern Ireland, 2002).

India's cervical cancer age-standardized incidence rate (30.7 per 100,000) and age-standardized mortality rate (17.4 per 100,000) are the highest in South-Central Asia (Ferlay et al., 2004). Having the highest fatality-to-case ratio of all the gynecological malignancies, ovarian cancer is of public health importance (Berek, 2002; Laurvick et al., 2003). However, endometrial carcinoma and vulval / vaginal carcinoma are usually the malignancy of elderly women, thereby raising the mortality significantly. It has been reported in earlier literature by the same authors that, in the developing countries like India, poor knowledge about these cancers and health care seeking behavior of the patients add to this burden significantly (Sarkar et al., 2010).

Methods for optimal screening of gynecological cancers are still being investigated. Cervical cancer is the only gynecological malignancy for which a screening modality is widely accepted and recommended to all women (Lea and Miller, 2001). However, being a laboratory-based test, Pap smear requires appropriate infrastructure and skilled manpower. This is a cost

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intensive procedure too. In Indian perspective, low-cost options are more acceptable. Visual inspection tests are being researched as low-cost alternatives to Pap smear. In many cases, ovarian cancer is curable if detected early (Senate Community Affairs References Committee, Commonwealth of Australia, 2006). Though no modality has been shown as an effective screening method for ovarian cancer (Lea and Miller, 2001). Prevention of these cancers also requires further improvement in the efficiency of the available screening methods.

Worldwide, cancer incidence rates vary widely between different geographic regions and ethnic groups. The estimation of cancer burden is valuable to set up priorities for disease control (Sankaranarayanan and Ferlay, 2006). In India, despite the network of registries over the length and breadth of the country, a realistic estimate of the gynecological cancers is lacking due to the non-availability of adequate data, poor recording systems, poor referral practices, lack of cancer awareness, poor health education and inaccurate death certification.

Cancer registries in different parts of India reveal that majority of cancer cases present in an advanced stage (Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, 2005), which reduces their chances of survival even after treatment. Therefore, prevention, early detection and treatment seeking pattern for cancer needs more attention. The knowledge and skills in the above areas need to be enhanced.

In order to understand the symptomatological significance of identifying the possible cases of gynecological malignancies, this study was undertaken with the following objectives:

1) To identify the patients attending the gynecology out-patient clinic suffering from the symptoms suggestive of gynecological malignancies and histopathologically confirm their diagnoses.

2) To find out the proportion of the histopathologically confirmed gynecological malignancies specific to its site.

Materials and Methods

This hospital-based cross-sectional observational study was conducted in the gynecology out-patient clinic, Department of Obstetrics and Gynecology, Nilratan Sircar Medical College and Hospital, a tertiary care hospital in Kolkata, West Bengal, India, over one year, from May 2006 to April 2007.

Study Population

The study population consisted of newly registered patients with gynecological morbidity of variable severity, attending the gynecology out-patient clinic of the above-mentioned hospital. The number of days available for the data collection was two fixed days each week, which were chosen by lottery method. Thus, Friday and Saturday were chosen. According to the previous records (2002-2003, 2003-2004 and 2004-2005), the total number of gynecological malignancy patients reported annually on Friday and Saturday was on an average 215, among the average total number of 5,126 newly registered patients.

Therefore, the expected percentage of the patients with gynecological malignancy, based on the previous records, was calculated as 4.2%, among the total new gynecological morbidity cases on Friday and Saturday.

As the expected number of patients with gynecological morbidity during the period of study, based on the previous records, was approximately 4,272, around 50% of these patients, i.e. 2,136 were proposed to be selected for the study, with random selection of the first patient and then every alternate patient. However, it was possible to cover 2,141 patients during the period of study.

Study Tools

1) A pre-designed and pre-tested checklist and a pre-designed and pre-tested schedule; 2) Hospital records; 3) Past health records of the patients; 4) Investigation reports, particularly histopathology reports; 5) Cusco's bivalve self-retaining vaginal speculum; 6) Stethoscope and sphygmomanometer.

Methodology

Permission was obtained from the hospital authority. The checklist and the schedule were drawn up in English, translated in Bengali (local language) and back translated in English to check the translation. Pre-testing of the checklist and the schedule were done in the gynecology out-patient clinic of the same hospital before starting of the study on 10 patients and accordingly necessary modifications were made and these were finalized. The gynecology out-patient clinic was visited as said. The patients with the symptoms suggestive of gynecological malignancies were screened out. Presence of at least two suggestive symptoms was considered for inclusion of the patients. The symptoms considered for screening were contact bleeding, irregular, heavy or prolonged vaginal bleeding, postmenopausal bleeding, excessive, offensive with or without blood stained vaginal discharge, lump in abdomen, abdominal distension or discomfort, vulval growth. Informed consent was obtained to conduct the study from all the eligible patients who were willing to cooperate the physical examination and necessary investigations. Necessary examinations and investigations, especially histopathological examination were done for confirmation of diagnosis. The checklist was used for screening and the schedule was used for the patients with histopathologically confirmed gynecological malignancies. The schedule consisted of few sections, i.e. general information, detailed history (menstrual history including menstrual hygiene, obstetrical, medical, surgical, family and personal history), presenting symptoms, clinical examination findings, histopathological examination reports, definitive diagnosis with FIGO staging of gynecological malignancies and finally in-depth interview questions regarding knowledge about gynecological malignancies and health care seeking behavior of the patients.

Analysis of Data

Data obtained were collated and analyzed statistically by simple proportions and tests of significance (chi-square test), as and when necessary.

Limitations of the study

As the study population was screened out to identify the possible cases of gynecological malignancies on the basis of certain symptoms, few cases of gynecological malignancies not having the suggestive symptoms might have been missed.

This study was undertaken among women who presented to a gynecology out-patient clinic for diagnosis and treatment of gynecological morbidities and who agreed to participate in the research. Care has to be taken not to extrapolate the findings of this study to all women suffering from gynecological malignancies in the community.

This study could possibly be compared with similar studies from the developing world. The findings of this study might not corroborate with similar studies from the developed nations.

Results

This study shows that, during the period of study, the patients attending the gynecology out-patient clinic, Department of Obstetrics and Gynecology of the said hospital were screened out to identify the patients suffering from the symptoms suggestive of gynecological malignancies. Thus, 483 patients (22.6%) were screened out among the 2,141 patients. After exclusion of 6 patients (0.3%) who were lost to follow up, 477 patients (22.3%) suffering from the symptoms suggestive of gynecological malignancies were further studied and the diagnosis of all of them was confirmed by histopathology. Finally, 113 patients, i.e. 5.3% of the overall outpatients or nearly one-fourth (23.7%) of the patients with the suggestive symptoms of gynecological malignancies were diagnosed as the histopathologically confirmed cases of gynecological malignancies.

Among the 2,141 patients screened, 1,658 (77.4%) patients had absence of at least two suggestive symptoms of gynecological malignancies. Maximum number of patients (415 out of 2,141 patients or 19.4%) with at least two suggestive symptoms reported excessive, offensive with or without blood stained vaginal discharge, followed by irregular, heavy or prolonged vaginal bleeding (13.7%)

and postmenopausal bleeding (4.7%). Other symptoms reported were lump in abdomen (4.0%), abdominal distension or discomfort (2.1%), contact bleeding (0.7%) and vulval growth (0.1%) (Table 1).

Table 2 shows that most of the patients (415 out of 477 patients or 87.0%) with the symptoms suggestive of gynecological malignancies presented with excessive, offensive with or without blood stained vaginal discharge, followed by irregular, heavy or prolonged vaginal bleeding (61.4%) and postmenopausal bleeding (21.2%). All the patients with contact bleeding (14 patients) or vulval growth (2 patients) were suffering from the histopathologically confirmed gynecological malignancies. Higher proportion of the patients with histopathologically confirmed gynecological malignancies presented with postmenopausal bleeding (31.9%), lump in abdomen (26.5%) and abdominal distension or discomfort (22.1%) than that of the patients with other morbidities (17.9%, 15.1% and 5.2% respectively).

Table 3 depicts that the commonest histopathologically confirmed gynecological malignancy was cervical

Table 1. Distribution of the Study Population According to the Suggestive Symptoms of Gynecological Malignancies (n=2141)

Suggestive Symptoms*	Number of Patients
Contact Bleeding@	14 (0.7)
Irregular, Heavy or Prolonged Vaginal Bleeding	293 (13.7)
Postmenopausal Bleeding	101 (4.7)
Excessive, Offensive With or Without Blood Stained Vaginal Discharge	415 (19.4)
Lump in Abdomen	85 (4.0)
Abdominal Distension or Discomfort	44 (2.1)
Vulval Growth	2 (0.1)
Absence of At Least Two Suggestive Symptoms	1658 (77.4)

Figures in the parentheses indicate percentages.*Multiple responses; @Contact bleeding: It includes bleeding during examination and sexual intercourse; Source: Senate Community Affairs References Committee, Commonwealth of Australia (2006).

Table 2. Distribution of Patients with Histopathologically Confirmed Gynecological Malignancies and Other Morbidities According to Suggestive Symptoms of Screening (n=477)

Suggestive Symptoms*	Gynaecological Malignancies (n=113)	Other Morbidities# (n=364)	Total (n=477)
Contact Bleeding@	14 (12.4)	-	14 (2.9)
Irregular, Heavy or Prolonged Vaginal Bleeding	41 (36.3)	252 (69.2)	293 (61.4)
Postmenopausal Bleeding	36 (31.9)	65 (17.9)	101 (21.2)
Excessive, Offensive With or Without Blood Stained Vaginal Discharge	78 (69.0)	337 (92.6)	415 (87.0)
Lump in Abdomen	30 (26.5)	55 (15.1)	85 (17.8)
Abdominal Distension or Discomfort	25 (22.1)	19 (5.2)	44 (9.2)
Vulval Growth	2 (1.8)	-	2 (0.4)

Figures in the parentheses indicate percentages.*Multiple responses; @includes bleeding during examination and sexual intercourse; #include dysfunctional uterine bleeding, fibroid uterus, adenomyosis, chronic pelvic infection, benign polyps, cervical ectopy, benign ovarian neoplasms, cervico-vaginal infection, cervical tuberculosis, cervical intra-epithelial neoplasia

Table 3. Relative Frequencies of Gynecological Malignancies (n=113)

Site of Malignancies	Number (%)
Cervix	70 (61.9)
Ovary	27 (23.9)
Endometrium	6 (5.3)
Vulva	2 (1.8)
Vagina	2 (1.8)
GTN	6 (5.3)
Total	113 (100.0)

malignancy, which constituted 61.9% of the cases (70 out of 113 patients), followed by ovarian malignancy (23.9%). Only 6 patients (5.3%) were suffering from endometrial malignancy. Gestational trophoblastic neoplasia was found in 6 patients (5.3%). Vulval malignancy and vaginal malignancy were rare (2 patients or 1.8% each).

More than two-third of the patients with gynecological malignancies (78 out of 113 patients or 69.0%) were in the age range of 35-64 years with mean age of 45.8 years. More than two-third of the patients with gynecological malignancies (69.0%) had come from rural area. Almost all the patients with gynecological malignancies (96.5%) were "ever-married", i.e. currently married or widowed or separated. More than half of the patients with gynecological malignancies (54.9%) were illiterate / just literate. Median value of the per capita monthly income of family of the patients was Rs. 400 and mean value was Rs. 543 with range of Rs. 100-2,500. The mean per capita monthly income of family of the patients in this study is nearly one-fourth of that of India's value. Nearly two-third of the patients with gynecological malignancies (64.6%) were of parity 3 or higher with mean parity of 3.6.

Table 4 shows that the most frequently reported symptom by the patients with gynecological malignancies

was excessive, offensive with or without blood stained vaginal discharge (78 out of 113 patients or 69.0%), followed by irregular, heavy or prolonged vaginal bleeding (36.3%) and postmenopausal bleeding (31.9%). Other symptoms reported were abdominal pain (29.2%), lump in abdomen (26.5%), abdominal distension or discomfort (22.1%), contact bleeding (12.4%), pruritus vulvae (3.5%) and vulval growth (1.8%). Twenty-nine patients (25.7%) reported miscellaneous symptoms including loss of weight; respiratory distress; gastro-intestinal symptoms like dyspepsia, loss of appetite with a sense of bloating after meals, diarrhoea; urinary symptoms like frequency of micturition, pain in urination, difficulty in urination, haematuria, true incontinence of urine. Out of these 29 patients who had miscellaneous symptoms, 17 patients (58.6%) had ovarian cancer and 9 patients (31.0%) had cervical cancer. Interestingly, miscellaneous symptoms were present in 63.0% of the ovarian cancer patients and 12.9% of the cervical cancer patients.

This table also shows that most of the patients (65 out of 70 patients or 92.9%) with cervical malignancy reported excessive, offensive with or without blood stained vaginal discharge, whereas most of the patients (24 out of 27 patients or 88.9%) with ovarian malignancy reported lump in abdomen and two-third of the patients (4 out of 6 patients or 66.7%) with endometrial malignancy reported postmenopausal bleeding.

Discussion

This study is an attempt to understand the symptomatological significance of identifying the possible cases of gynecological malignancies. In a previous study by the same authors (Sarkar et al., 2010), it has been reported that the knowledge about the disease and health care seeking behavior of the patients suffering from

Table 4. Distribution of Patients with Gynecological Malignancies According to Presenting Symptoms (n=113)

Presenting Symptoms*	Cervix (n ₁ =70)	Ovary (n ₂ =27)	Endometrium (n ₃ =6)	Vulva (n ₄ =2)	Vagina (n ₅ =2)	GTN (n ₆ =6)	Total (n=113)
Contact Bleeding@	12 (17.1)	-	1 (16.7)	-	1 (50.0)	-	14 (12.4)
Irregular, Heavy or Prolonged Vaginal Bleeding	29 (41.4)	3 (11.1)	2 (33.3)	-	1 (50.0)	6(100.0)	41 (36.3)
Postmenopausal Bleeding	32 (45.7)	-	4 (66.7)	-	-	-	36 (31.9)
Excessive, Offensive With or Without Blood Stained Vaginal Discharge	65 (92.9)	4 (14.8)	3 (50.0)	2(100.0)	2(100.0)	2 (33.3)	78 (69.0)
Lump in Abdomen	1 (1.4)	24 (88.9)	1 (16.7)	-	-	4 (66.7)	30 (26.5)
Abdominal Distension or Discomfort	1 (1.4)	23 (85.2)	1 (16.7)	-	-	-	25 (22.1)
Abdominal Pain	14 (20.0)	16 (59.3)	1 (16.7)	-	-	2 (33.3)	33 (29.2)
Vulval Growth	-	-	-	2(100.0)	-	-	2 (1.8)
Pruritus Vulvae	1 (1.4)	1 (3.7)	-	2(100.0)	-	-	4 (3.5)
Miscellaneous#	9 (12.9)	17 (63.0)	-	2(100.0)	-	1 (16.7)	29 (25.7)

Figures in the parentheses indicate percentages. *Multiple responses; @includes bleeding during examination and sexual intercourse; #includes loss of weight, respiratory distress, gastro-intestinal symptoms like dyspepsia, loss of appetite with a sense of bloating after meals, diarrhoea, urinary symptoms like increased frequency of micturition, pain in urination, difficulty in urination, haematuria, true incontinence of urine.

gynecological malignancies is poor in India and it needs immediate attention in order to reduce the burden of the disease. Along with that, the health care personnel can play a very important role to help reduce the burden. In Indian scenario where regular medical check-up is not a routine practice and huge population makes it almost impossible to follow regular screening methods for all women, awareness regarding the symptoms may be helpful in prevention, early detection and timely treatment of gynecological malignancies.

During the study period, among the 2,141 patients attending the gynecology out-patient clinic of the said hospital, 483 patients (22.6%) were identified as the possible cases of gynecological malignancies on the basis of their symptoms. After exclusion of 6 patients (0.3%) who were lost to follow up, 477 patients (22.3%) could further be studied and their diagnoses were confirmed by histopathology. Finally, the diagnosis of 5.3% of the overall outpatients (113 out of 2,141 patients) or nearly one-fourth of the patients with the symptoms suggestive of gynecological malignancies (23.7% or 113 out of 477 patients) was histopathologically confirmed as gynecological malignancies. This indicates that symptomatological screening may be a feasible option for early detection of the possible cases of gynecological malignancies.

Most of the patients (87.0%) with the symptoms suggestive of gynecological malignancies reported excessive, offensive with or without blood stained vaginal discharge, followed by irregular, heavy or prolonged vaginal bleeding (61.4%) and postmenopausal bleeding (21.2%). All the patients with contact bleeding or vulval growth were suffering from the histopathologically confirmed gynecological malignancies. Higher proportion of the patients with histopathologically confirmed gynecological malignancies presented with postmenopausal bleeding (31.9%), lump in abdomen (26.5%) and abdominal distension or discomfort (22.1%) than that of the patients with other morbidities (17.9%, 15.1% and 5.2% respectively). Among the 477 patients with the symptoms suggestive of gynecological malignancies, the patients were also having other morbidities diagnosed as cervico-vaginal infection (29.0%), followed by chronic pelvic infection (13.0%), dysfunctional uterine bleeding (7.3%), fibroid uterus (6.9%), benign ovarian neoplasms (6.1%), cervical ectopy (5.9%), benign polyps (5.0%), adenomyosis (1.9%), cervical intra-epithelial neoplasia or CIN (1.0%) and cervical tuberculosis (0.2%). So, it can be said from the above findings that the symptoms like contact bleeding or vulval growth needs urgent attention for management. Furthermore, any of the above-mentioned symptoms should not be ignored and they need careful attention to rule out malignancy. The patients with the suggestive symptoms but not having malignancies were diagnosed as having some other disease conditions which also needed treatment. It has been reported in earlier literature by the same author that abnormal vaginal discharge is commonly present in the reproductive tract infections (Dasgupta and Sarkar, 2008) and poor menstrual hygiene is a very important risk factor for this ailment (Dasgupta and Sarkar, 2008).

This study shows that cervical malignancy was the commonest histopathologically confirmed gynecological malignancy that constituted 61.9% of the cases, followed by ovarian malignancy (23.9%). Contribution of other malignancies was endometrial malignancy and gestational trophoblastic neoplasia in 5.3% of the patients each. However, vulval malignancy and vaginal malignancy had the least contribution (1.8% of the patients each). The nearly similar observations were found in a hospital-based study conducted by Nkyekyer (2000) in Ghana, which had reported that cervical cancer was the commonest, constituting about 57.8% of gynecological cancers, followed by ovarian cancer, endometrial cancer, choriocarcinoma and vulval carcinoma (25.3%, 7.4%, 6.8% and 2.2% respectively). According to Mola and McGoldrick (1982), the commonest gynecological neoplasms registered in Papua New Guinea (PNG) were cervical carcinoma (62%), followed by carcinoma of the ovary (20.3%), carcinoma of corpus uteri (6.5%), carcinoma of the vulva (5%), choriocarcinoma (4.7%) and carcinoma of the vagina (1.2%). Chhabra et al. (2002) observed in a study conducted in a rural institute in India, that cervical cancer was the most common (80%) of all gynecological malignancies, followed by ovarian cancer (15%). Endometrial cancer was found only in 2.0% of all female genital malignancies. Gathoh and Darnal (1990) in an institution-based study reported that ovarian carcinoma constituted 12.08% of all malignant gynecological diseases and formed the second commonest gynecological malignancy after carcinoma of the cervix in Manipur, India. So, it is understood that, according to published literatures, in the developing countries, cervical malignancy is the commonest gynecological malignancy. Further study should be carried out in the different regions with different socio-economic backgrounds to confirm its occurrence and presenting symptoms.

In the present study, the most frequently reported symptom by the patients with histopathologically confirmed gynecological malignancies was excessive, offensive with or without blood stained vaginal discharge (69.0%), followed by irregular, heavy or prolonged vaginal bleeding (36.3%) and postmenopausal bleeding (31.9%). Most of the patients (92.9%) with cervical malignancy reported excessive, offensive with or without blood stained vaginal discharge, whereas most of the patients (88.9%) with ovarian malignancy reported lump in abdomen and two-third of the patients (66.7%) with endometrial malignancy reported postmenopausal bleeding. Certain number of patients had miscellaneous symptoms, which resembled very much after gastro-intestinal, urinary and respiratory problems. Interestingly enough, most of those patients (17 out of 29 patients or 58.6%) had ovarian cancer. It is understood from this observation that gynecological cancers especially ovarian cancer may have non-specific or misleading symptomatic presentation. Nearly similar to the findings of the present study, Chhabra et al. (2002) in a rural institutional study in India observed that white / blood stained discharge was complained by most of the patients (61.2%) with gynecological malignancies, followed by heavy, prolonged / infrequent menses / postmenopausal

bleeding (57.1%). Most frequently reported symptom among cervical malignancy patients was white / blood stained discharge (76.9%). In contrary to the present study, the most common presenting symptom among ovarian cancer patients as found by Chhabra et al. (2002) was pain in abdomen (62.8%). According to Odukogbe et al. (2004), abdominal swelling was the most common presenting symptom among the patients of ovarian cancer in a hospital of Nigeria. Sultana and Kiyani (2005) in their study conducted in a hospital of Pakistan observed that bleeding per vagina was the commonest feature amongst the patients of endometrial carcinoma. From the above discussion, it is found that various possible symptoms may likely be present in case of ovarian cancer, whereas abnormal vaginal discharge might be the commonest presenting symptom of cervical cancer.

This study reflects the importance of awareness among women as well as the health care personnel about the possible symptoms of gynecological malignancies and highlights the need for addressing and prioritizing resources towards educating women and the broader community about these malignancies, especially the symptoms.

It can be concluded from this study that the patients can be identified as possible cases of gynecological malignancies according to some suggestive symptoms, especially when regular screening procedures cannot be implemented in practice. So, women should be made aware not only about the possible warning symptoms, but also the urgency of seeking appropriate health care on experiencing any symptom like excessive, offensive with or without blood stained vaginal discharge, or irregular, heavy or prolonged vaginal bleeding, or postmenopausal bleeding, or contact bleeding, etc., because earlier a cancer is detected, the easier it is to treat. Health care personnel have a major role regarding this. Further, women should also be assured that having these symptoms does not mean that she have or will get cancer, but it indicates that she should report to a qualified health care provider promptly to exclude the possibility of malignancy as early as possible. As found in the present study that these symptoms might be present in other morbidities, which also need treatment.

Cervical malignancy has been identified as the commonest form of gynecological malignancy in this study and this finding corroborates with the findings of the studies from other developing countries.

This study and reported literature indicate that cervical malignancy has got some specific symptoms in most of the cases. In contrary to that, symptomatic presentation of ovarian cancer may be variable or non-specific in a good percentage of the patients. So, health care personnel should maintain a high index of suspicion while diagnosing possible malignancy cases.

A thorough symptomatological screening for gynecological cancer should be done in all women coming for some problem in the hospital so as to detect and treat the malignancies at the earliest and to decrease the incidence of advanced cancer. Even if cancer is not evident, continuation of follow up checking on a regular basis need to be ensured.

Further research to identify more specific and feasible options for early detection of gynecological malignancies is urgently needed.

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