The Socio-demographic Status of Women with Ovarian Tumor Attended a Tertiary Care Hospital in Bangladesh.

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Abstract:
Background: *Ovarian tumor is one of the most common gynecological tumors seen in female. Because of its anatomical location, ovarian tumors may remain unnoticed for a long period of time. Among tumors or cancers of the female genital tract, the incidence of ovarian tumors ranks only below carcinoma of the cervix and the endometrium. As early ovarian tumor or cancer is not associated with significant symptoms, most women present with advanced disease.*
Aim of the study: *The aim of this study was to evaluate the socio-demographic status of women with ovarian tumors in a tertiary care hospital in Bangladesh.*
Methods: *This cross-sectional observational study was conducted at the Department of Obstetrics & Gynae, Rajshahi Medical College & Hospital, Rajshahi, Bangladesh during the period from December 2017 to November 2019. In total 240 women from several age groups with ovarian tumors were enrolled as the study population. In each case, information about the patient was collected in a prescribed questionnaire after getting written consent from the patients in a preformed consent form.*
Result: *In this study among total participants, the highest number of patients were from the 51-59 years age group which was 38.33%. Then 2.50%, 8.33%, 22.50% and 28.33% patients were from <20, 20-30, 31-40 and 41-50 years age groups respectively. Among all the participants, 64% were from rural areas whereas 36% were from urban areas. Most of the patients with ovarian tumors were housewives (79%). Besides this 10%, 5%, and 5.83% were service holders, students, and day laborers respectively.*
Conclusion: *The findings of this study referred that, a major portion of patients with ovarian tumor come from rural areas in Bangladesh. Till now a large number of lower and middle income group patients had not adopted any type of contraceptive method here. In Bangladesh, awareness building upon ovarian tumors and other related health issues may play a vital role in preventing and treating ovarian tumors.*
Keywords: *Ovarian tumor, Women, Parity, Socio-demographic, Malignancy.*

I.   Introduction

Generally, ovarian tumors, or ovarian neoplasms, are tumors arising from the ovary. These tumors can be benign or malignant. They consist of mainly solid tissue, while ovarian cysts contain fluid.[1] These tumors behave in diverse ways and are generally not detected until they get large size[2]. Ovarian tumors may be cystic or solid in consistency. Most of the benign tumors are cystic but 80% of solid ovarian tumors are malignant[3]. There are a number of risk factors associated with their origin. None of these has been yet proved except for age and parity[4]. The relative risk for ovarian malignancy increases significantly after the age of 40 years[5]. Early menarche and late menopause are associated with an increased risk[6]. The use of oral contraceptives is associated with a reduced risk of benign ovarian neoplasma[7]. Common symptoms include abdominal distension, abdominal and pelvic pain, and dyspepsia, and also increased frequency of urine[8]. Family history of ovarian and breast cancer has a strong link and is considered a major risk factor for ovarian cancer[9]. One theory is that ovarian

carcinoma arises from endometriosis; it is the presence of endometrial tissue rather than uterus[10]. In this study, our main goal was to evaluate the socio-demographic status of women with ovarian tumors in a tertiary care hospital in Bangladesh.

II. Objective

General Objective:
- To evaluate the socio-demographic status of the participants.

Specific Objective:
- To assess the age distribution of the participants.
- To collect information regarding the residential and occupational status of participants.
- To collect information regarding the clinical status of the participants.

III. Methodology

This cross-sectional observational study was conducted at the Department of Obstetrics & Gynae, Rajshahi Medical College & Hospital, Rajshahi, Bangladesh during the period from December 2017 to November 2019. In total 240 women from several age groups with ovarian tumor were enrolled as study population. In each case, information about the patient was collected in a prescribed questionnaire after getting written consent from the patients in a preformed consent form. During the study, medical history was taken from the women, with specific attention to risk factors and family history of bowel, breast and ovarian cancer. Clinical examination and laboratory investigations were carried out. Primarily, ultra-sonogram of whole abdomen (W/A), transvaginal sonogram (TVS) with Doppler study and CA125 were done. MRI, CT scan and PET scan were reserved for the cases where ultrasonogram findings were suspicious. Risk of malignancy index (RMI) was assessed for all the cases. Statistical analysis was performed using the Statistical package for social science, SPSS version 23.0. A descriptive analysis was performed for clinical features and results were presented as mean ± standard deviation for quantitative variables and numbers (percentages) for qualitative variables.

IV. Results

In this study among total participants, the highest number of patients were from 41-59 years' age group which was 38.33%. Then 2.50%, 8.33%, 22.50% and 28.33% patients were from <20, 20-30, 31-40 and 41-50 years' age groups respectively. Among all the participants, 64% were from rural areas whereas 36% were from urban areas. Most of the patients with ovarian tumor were housewife which was 79%. Besides this 10%, 5% and 5.83% were service holder, student and day laborer respectively. In this study, in analyzing the parity of the participants we observed 68% were multipara whereas the rest 32% were nullipara. Previous family history of ovarian tumor was found among only 18% participants whereas the rest 82% were free from family history. On the other hand, in analyzing the using of contraceptive methods of the participants we observed that, 32.50%, 21.67%, 8.33%, 20.83%, 5.83% and 10.83% participants used to barrier method, irregularly used of injectable, natural method, OCP irregularly, calendar method and nothing as contraceptive methods respectively.

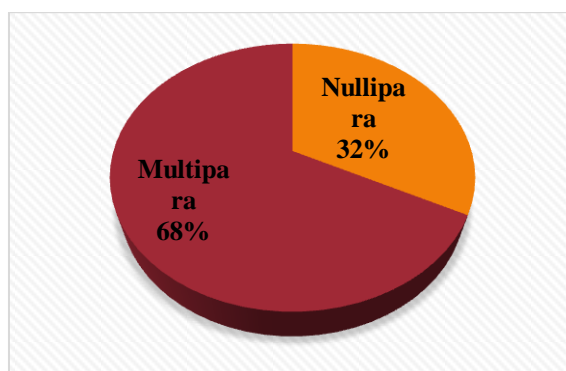**Table I:** Age distribution of participants (n=240)

Age (Year)	n	%
<20	6	2.50
20-30	20	8.33
31-40	54	22.50
41-50	68	28.33
51-59	92	38.33
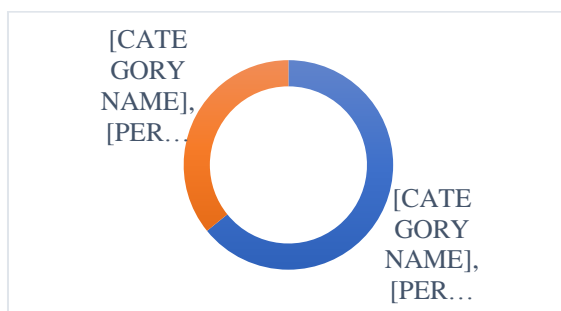
Figure I: Residential status of participants (n=240)

Table II: Occupational status of participants (n=240)

Occupation	n	%
Housewife	190	79.17
Service holder	24	10.00
Student	12	5.00
Day laborer	14	5.83

Figure II: Parity status of participants (n=240)

Table III: Clinical status of participants (n=240)

Characteristics	n	%
Previous family history		
Yes	44	18.33
No	196	81.67
Contraceptive methods		
Barrier method	78	32.50
Irregularly used of injectable	52	21.67
Natural method	20	8.33
OCP irregularly	50	20.83
Calendar method	14	5.83
Nothing	26	10.83

V. Discussion

The aim of this study was to evaluate the socio-demographic status of women with ovarian tumor in a tertiary care hospital in Bangladesh. In total 240 women from several age groups with ovarian tumor were enrolled as study population. In each case, information about the patient was collected in a prescribed questionnaire after getting written consent from the patients in a preformed consent form. During the study, medical history was taken from the women, with specific attention to risk factors and family history of bowel, breast and ovarian cancer. Clinical examination and laboratory investigations were carried out. In our study among total participants, the highest number of patients were from 51-59 years age group which was 38% which was very similar to Wills V et al.[11] The mean age of the occurrence of ovarian tumor was 39 years which was very closed to that of Sheik et al, but it is much lower than the studies done by Mondal et al and Wasim et al who reported the mean age as 48 and 49.5 years respectively.[12] A study by Murthy NS et al, involving data across various cities in India, revealed that the incidence of ovarian cancer increases from 35 years of age reaching its peak between 55-64 years.[13] But the emphasis should be given to rule out malignancy in all age groups. In another study they stated that, the patients older than 65 years at diagnosis presented more frequently than younger patients with a poor performance status and had decreased survival.[14] In our study, among all the participants, 64% were from rural areas whereas 36% were from urban areas. Most of the patients with ovarian tumor were housewife which was 79%. Besides this 10%, 5% and 5.83% were service holder, student and day laborer respectively. In this study, in analyzing the parity of the participants we observed 68% were multipara whereas the rest 32% were nullipara. Previous family history of ovarian tumor was found among only 18% participants whereas the rest 82% were free from family history. Ovarian cancer is common in low parity & infertile women probably due to incessant ovulation theory. In this study, 33% women who had ovarian tumor were nulliparous while 67% were multiparous. However in study conducted by khan I, at KEMU/Lady Willington hospital, 58.15% women who had ovarian tumor were multipara[15]. In another population-based case control study, Titus Ernstaff et al. found that risk of ovarian tumors was higher in multiparous[16], a woman which is comparable to results of my study. Family history of ovarian and breast cancer has strong link and considers as major risk factor for ovarian cancer[9]. One theory is that ovarian carcinoma arises from endometriosis; it is the presence of endometrial tissue rather than uterus[10].

Limitations of the study:

This was a single centered study with a small sized sample. So, the findings of this study may not reflect the exact scenario of the whole country.

VI. Conclusion

The findings of this study referred that, major portion of patients with ovarian tumor come from rural areas in Bangladesh. Till now a large number of lower and middle income group patients had not adopted any type of contraceptive method here. In Bangladesh, awareness building upon ovarian tumors and other related health issues may play a vital role in preventing and treating ovarian tumors. All these findings may be helpful in the treatment arena of ovarian tumor and further similar studies.

VII. Recommendations:

Devotion to treatment guidelines is related to an equivalent survival advantage through civilization and socioeconomic status. Determinations to eradicate sociodemographic-based discrepancies in ovarian cancer existence should be focused on confirming equal access to skilled maintenance by health care providers. It is evident that low socioeconomic status are independent risk factors for insufficient attention, even after regulating for the existence of medical comorbidities, is disturbing.

Conflict of interest: None.

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