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# AWARENESS ABOUT VERTEBRAL CANCER IN POSTGRADUATE BIOLOGY STUDENTS

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#### Abstract:-

Vertebral cancer or tumor is a type of cancer which is caused either by formation of tumor in spinal cord and spread in the vertebrae, any type of cancer can proliferate vertebrae, bone cancer can also spread to spine but mostly the vertebral cancer is caused by metastasis of tumor from different parts mainly from breast, prostate, and lungs. A questioner was prepared and awareness among 38 postgraduate biology student was studied it was found that according to the results 56.6% students consider it a viral disease whereas 2% consider it as bacterial and fungal disease, 60.2% consider it as a genetic disease and 40.9% consider it a metabolic disease None of the student suffer from the disease whereas 2.63% student's relative and family suffer from the disease, according to 23.6%student the disease can be transferred by blood and 35.57% says that it is transferred from parent to offspring's. According to 65.5% student disease can be cured by medicine, 82.31% agreed that surgery is used for treatment and according to 8.894% student the disease is not curable, hence it was concluded that some of the postgraduate biology students were aware of disease and some have little knowledge. Key words: vertebral cancer, proliferation, breast cancer, lung cancer

#### INTRODUCTION

CANCER is the uncontrolled division of cells which results in tumor formation which may be benign tumors which are localized to place where they are formed or metastatic tumors which proliferate other parts of body among different types of cancer that occur in body vertebral cancer or tumor is a type of cancer which is caused either by formation of tumor in spinal cord and spread in the vertebrae, any type of cancer can proliferate vertebrae, bone cancer can also spread to spine but mostly the vertebral cancer is caused by metastasis of tumor from different parts mainly from **breast** (Kherfani et al., 2014), **lung** (De Jong et al., 2014)and **prostate** and result in vertebral compression (Kaloostian et al., 2014).

Cancerous and non-cancerous both tumors can suppress the spinal nerves leading to loss of sensation and movement in an area of its formation, bones of the spine can also be damaged and become unstable due to vertebral cancer or tumor, the risk for fracture or collapse of the spine is raised resulting in injury of spinal cord. However if diagnosed in early stages and treated properly the loss of function can be prevented .The basic purpose of this study was to determine the awareness among the postgraduate students about vertebral cancer.

#### **METHODOLOGY**

A questionnaire was conducted (table 1) among the postgraduate students of biology to evaluate how much they are aware about the disease the questionnaire have many different questions regarding the disease and 38 students (6 males, 32 females) were selected from Bahauddin Zakariya university Multan Pakistan the inclusion criteria was student of master of philosophy exclusion criteria was students were not of BS level

Table 1: Questionnaire to evaluate awareness about etiology of vertebral cancer

Vertebral cancer is a	Yes	No
1. Viral disease		
Bacterial disease		
3. Fungal disease		
4. Genetic disease		
Metabolic disease		
Ever suffered from <u>vertebral cancer</u>		
6. You		
7. Your family		
8. Your relative		
9. Your neighbor		
10. Your friend		
Vertebral cancer is transmitted by		
11. Contacts or blood transfusion		
12. From parents to offspring		
<u>Vertebral cancer</u> may be treated by		
13. Medicines		
14. Surgery		
15. Do not worry, it is easily curable		

#### RESULTS AND DISCUSSIONS

Awareness about etiology of vertebral cancer in postgraduate student showed that according to their knowledge, 16.6% male and 65.6% females consider it a viral disease, 6.25% female and 0% male consider it a bacterial and fungal disease, 83% male and 68.75% female consider it as a genetic disease whereas 33.3% male and 56.25% female consider it a metabolic disease (Table 2).

When studying their awareness about disease in relation to them, their family, relative, neighbor and friend, 0% male and female themselves suffer from the disease, according to 3.125% females their families suffer from vertebral cancer, 3.125% female's relative and 3.125% female's neighbor suffer from disease. (Table 3)

When studying their knowledge or awareness about the vertebral cancer transmission it was found that according to 0% male and 28.125% female the disease can be transmitted by blood whereas according to 66.6% males and 37.5% females the disease can be transmitted from parents to offspring (Table 4).

Their awareness about the treatment of disease showed that according 83.3% male and 71.875% females the disease can be treated by medicines, according to 100% of males and 90.625% of females the disease can be treated by surgery, whereas 16.6% males and 9.375% females says that the disease is not curable.(Table 5).

Table 2: Awareness about etiology of VERTEBRAL CANCER: Views of Postgraduate Biology Students

Questions	Male		Female		Total	
Vertebral cancer is a	Yes	No	Yes	No	Yes	No
1. Viral disease	16.6%	83%	65.6%	34.4%	56.26%	33.94%
Bacterial disease	0%	100%	6.25%	93.7%	2%	84.94%
3. Fungal disease	0%	100%	6.25%	93.75%	2%	84.94%
4. Genetic disease	83%	16.6%	68.75%	34.5%	60.20%	79.94%
5. Metabolic disease	33.3%	66.6%	56.25%	43.75%	49.36%	40.84%

Table 3: Awareness about etiology of vertebral cancer: Views of Postgraduate Biology Students

Questions ever suffered	Male		Female		Total	
from vertebral cancer	Yes	No	Yes	No	Yes	No
6. You	0%	100%	0%	100%	0%	100%
7. Your family	0%	100%	3.125%	96.875%	2.63%	31%
8. Your relative	0%	100%	3.125%	96.875%	2.63%	31%
9. Your neighbor	0%	100%	3.125%	96.875%	2.63%	31%
10. Your friend	0%	100%	0%	100%	0%	100%

Table 4: Awareness about etiology of vertebral cancer Views of Postgraduate Biology Students

Questions	Male		Female		Total	
Vertebral cancer is transmitted by	Yes	No	Yes	No	Yes	No
11. Contacts or blood transfusion	0%	100%	28.125%	71.875%	23.68%	66.52%
12. From parents to offspring	66.6%	33.3%	37.5%	81.25%	35.57%	70.42%

Table 5: Awareness about etiology of vertebral cancer: Views of Postgraduate Biology Students

Questions	Male		Female		Total	
	Yes	No	Yes	No	Yes	No
13. Medicine	83.3%	16.6%	71.875%	46.875%	65.5%	40.47%
14. Surgery	100%	0%	90.625%	9.375%	82.31%	7.89%
15. Don't worry it is curable	16.6%	83.3%	9.375%	90.625%	8.894%	81.31%

#### **CONCLUSION**

It is concluded from this study that some postgraduate students were aware of the disease and some don't have full knowledge about the disease

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