



# Awareness about Melanoma in Biotechnology Students



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## Abstract

Most common type of cancer is melanoma which occurs abundantly worldwide. Melanin is a skin pigment that is produced by skin melanocytes in case or malignant melanoma that effects the melanocytes and then cause the faults in pigment production. The occurrence of melanoma is most common in people with light colored skin on exposure to sunlight as compared to darker ones. The basic purpose of this study was to determine the awareness among the biotechnology students about the melanoma. A questionnaire based on 15 questions about melanoma was developed and being fulfilled by postgraduate students. Survey shows that 81% of total students thought the major cause of melanoma is not virus. On average 56-67% students thought that melanoma is either a genetic disease or it arises due to metabolic problems. This survey among biotechnology students of M. Phil. shows that some are aware and some are not aware about melanoma.

**Keywords:** Telomerase; Topoisomerase; Telomeres; Quercetin

## Introduction

Most common type of cancer is melanoma which occurs abundantly worldwide. Melanin is a skin pigment that is produced by skin melanocytes in case or malignant melanoma that effects the melanocytes and then cause the faults in pigment production. The occurrence of melanoma is most common in people with light colored skin on exposure to sunlight as compared to darker ones. Melanoma is caused by the mutation in CDKN2A and CDK4 genes. Chromosome 1 (1p22) and some other genes may be the cause of melanoma but it is still under observation [1]. In US alone, 1 person dies of melanoma in every 52 minutes. Besides, New Zealand and Australia are the top countries with highest death rate associated with melanoma patients. The statistics may become aggravated in future if ozone layer remains unrepaired or continues to deplete. When compared, there are far lesser studies conducted on melanoma and the use of gold nanoparticles than other types of cancers such as prostate, breast, lung cancers. As with other cancers, effective treatment strategies needs to be studied about melanoma due to the large no. of deaths associated with it which cannot be ignored [2]. The basic purpose of this study was to determine the awareness among the biotechnology students about the melanoma.

## Methodology

A questionnaire based on 15 questions about melanoma was developed (Table 1). This questionnaire was distributed among 38 students of M. Phil. Biotechnology of Bahauddin Zakariya University Multan and being fulfilled by them. This survey is given in (Table 1).

**Table 1:** Questionnaire to evaluate awareness about etiology of Melanoma.

Major Cause of Melanoma is	Yes	No
1. Viral disease		
2. Bacterial disease		
3. Fungal disease		
4. Genetic disease		
5. Metabolic disease		
Ever Suffered from Melanoma		
6. You		
7. Your family		
8. Your relative		
9. Your neighbor		
10. Your friend		
Mode of Transmission of Melanoma		
11. Contacts or blood transfusion		
12. From parents to offspring		
Possible Treatment of Melanoma		
13. Medicines		
14. Surgery		
15. Do not worry, it is easily curable		

## Result and Discussion

Awareness of postgraduate students about etiology of the melanoma is given in (Table 2). Survey shows that 81% of total students thought the major cause of melanoma is not virus. On average 56-67 % students thought that melanoma is either a genetic disease or it arises due to metabolic problems. Almost 100% of students said that the never encounter melanoma in their family and relatives. 30-40 % students thought the transmission of melanoma is inher-

ited. 91% of students thought medicine is the effective treatment of melanoma and 54% students thought that surgery is also an effective treatment. Previous studies show that 3 Survey of skin diseases in Asian people among 9273 children, the 11 most common diagnoses were eczema (49.3%), viral infections (6.5%), pigmentation disorders (5.5%), bacterial infections (4.9%), parasitic infections (3.8%), urticaria (3.8%), acne vulgaris (3.1%), fungal infections (2.5%), alopecias (1.8%), and psoriasis (1.1%). Most common disease in Asian people is Eczema [3].

**Table 2:** Awareness about etiology of Melanoma: views of postgraduate biology students.

Questions	Male		Female		Total	
	Yes	No	Yes	No	Yes	No
Major cause of Melanoma						
1. Viral disease	0%	100%	37.50%	62.50%	18.75%	81.25%
2. Bacterial disease	0%	100%	18.75%	81.25%	9.38%	90.63%
3. Fungal disease	0%	100%	21.87%	78.13%	10.93%	89.05%
4. Genetic disease	66%	34%	46.87%	53.13%	56.43%	43.56
5. Metabolic disease	66%	34%	68.75%	31.25%	67.37%	32.62
Ever suffered from Melanoma						
6. You	0%	100%	0%	100%	0%	100
7. Your family	0%	100%	0%	100%	0%	100
8. Your relative	0%	100%	0%	100%	0%	100
9. Your neighbor	16.66%	83.34%	0%	100%	8.33%	91.67
10. Your friend	0%	100%	0%	100%	0%	100
Mode of transmission of Melanoma						
11. Contacts or blood transfusion	0%	100%	6.25%	93.75%	3.12%	96.87
12. From parents to offspring	16.66%	83.34%	46.87%	53.12%	31.76%	68.23
Possible Treatment of Melanoma						
13. Medicines	83.33%	16.67%	100%	0%	91.66%	8.33
14. Surgery	33.33%	66.67%	75%	25%	54%	45%
15. Do not worry, it is easily curable	83.33%	16.67%	25%	75%	54%	45%

## Conclusion

This survey among biotechnology students of M. Phil. shows that some are aware and some are not aware about melanoma, while some are fully aware and others are not fully aware about melanoma.

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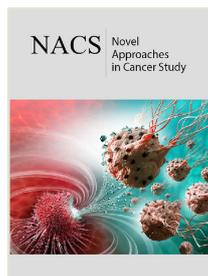
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