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Melanoma Awareness and self-examination Practices in Saudi Arabia

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ABSTRACT

Background: Althoughmelanoma rationalizes less than 1% of cases with skin cancer, it accounts for the greater number of skin cancer deaths.

Objectives: The objective of this study was to investigate the current knowledge and self-examination practices in Saudi Arabia.

Subjects and methods: A cross-control study was conducted using an anonymous web-based survey. A total of 203subjects from Saudi Arabia took part in this survey during the period from 11 December 2017 to 23 December 2017.Participants were asked to fill an anonymous survey about their demographic characteristics, knowledge, attitudes, and practices regarding early detection of melanoma.

Results: The majority of the subjects were males (55%), university/post graduates (78%), single (83%) and have no children (89%).Around 76% of our population was aware of melanoma, about 65% were aware of its risk factor, and about 55% could identify its early symptoms. The greater number of subjects 196(96.6%) reported that they did not conduct self-examination.

Conclusion: Despite the fact that the majority of our population was aware of melanoma, our study suggests designing and implementing awareness campaigns and programs to highlight the importance of early detection of melanoma and skin self-examination (SSE).

Keywords: Melanoma, Awareness, Self-examination, Skin, Survey.

INTRODUCTION

Melanoma is defined as a form of cancer that begins in melanocytes [1]. Despite the fact that it rationalizes less than 1% of cases with skin cancer, it accounts for the greater number of skin cancer deaths[2].

As reported by National Cancer Institute (NCI), in 2014, an estimate of 1,169,351 patients were suffering from skin melanoma in the United States. Skin melanoma represents 5.2% of all new cancer cases in the United States[3].

Previous studies were conducted to investigate and document the current knowledge and self-examination practices of melanoma[4,5,6] but little is known in the Saudi population.

The aim of this study was to investigate the current knowledge and self-examination practices of melanoma in Saudi Arabia.

MATERIALS AND METHODS

Subjects: This cross-sectional study was conducted using an anonymous web-based survey. A total of 203 subjects from Saudi Arabia took part in this survey. Participants were asked to fill an anonymous survey about their demographic characteristics, knowledge, attitudes, and practices regarding early detection of melanoma. The survey was conducted during the period from 11 December 2017 to 23 December 2017. Institutional review board approval was obtained before conducting any study-related procedures. **The study was done after approval of ethical board of King Abdulaziz university.**

Data collected: The survey consisted of 13 questions. The first five questions were about demographics. The rest of the questions were to ask about the extent of the current knowledge and performing self-examination of melanoma.

Statistical analysis

Data were statistically described in terms of frequencies (number of cases) and valid percentages for categorical variables. Mean, standard deviations, minimum and maximum were used to describe numerical variable. All statistical calculations were done using computer program IBM SPSS (Statistical Package for the Social Science; IBM Corp, Armonk, NY, USA) release 21 for Microsoft Windows.

RESULTS

Participants' characteristics (N=203):

Collecting demographic data from subjects revealed that 111 (54.7%) were males while 92 (45.3%) were females, with a mean age of 23.4 ±7.1 years.

The majority of subjects 159(78.3%) were university/post graduates, 39 (19.2%) received secondary education, 4 (2.0%) received intermediate education while only one (0.5%) subject completed primary education.

Regarding marital status, the majority of subjects 169(83.3%) were single, 32 (15.8%) were married and only one (0.5%) subject was divorced and another one (0.5%) was widowed.

Subjects were also asked about the number of children they have. The majority 180(88.7%) reported that they do not have children while only 23 (11.3%) reported that they at least have one child.Further details are provided in table (1).

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Table (1): Participants' characteristics

Age					
N	Minimum	Maximum	Mean	Std. Error	Std. Deviation
185	15.0	60.0	**23.4**	.5225	**7.1**
Gender					
	Count		Percentage		Cumulative %
Female	92		45.3		45.3
Male	111		54.7		100.0
Total	**203**		**100.0**		
Educational Level					
	Count		Percentage		Cumulative %
Intermediate	4		2.0		2.0
Primary	1		.5		2.5
Secondary	39		19.2		21.7
University/ Postgraduate	159		78.3		100.0
Total	**203**		**100.0**		
Marital Status					
	Count		Percentage		Cumulative %
Divorced	1		.5		.5
Married	32		15.8		16.3
Single	169		83.3		99.5
Widowed	1		.5		100.0
Total	**203**		**100.0**		
Do you have children?					
	Count		Percentage		Cumulative %
No	180		88.7		88.7
Yes	23		11.3		100.0
Total	**203**		**100.0**		

Melanoma awareness (N=203)

When subjects were asked about their knowledge of melanoma, the majority 130(64%) reported that they know that it is some kind of skin cancer, 25 (12.3%) said that it is some kind of cancer and the rest (48, 23.6%) reported that they do not know what melanoma is.

History of sun exposure was the most frequent answer given 73 (36%) when subjects were asked what increases the risk of melanoma, followed by family history of melanoma 43(21.2%), bad sunburns in childhood 11 (5.4%), being born with moles 2 (1%), having lots of moles 1 (0.5%), thin skin 1 (0.5%) and more than one reason 1 (0.5%).Around one quarter (71, 35%) reported that they are not aware of melanoma risk factors.

Subjects were asked about the early symptoms of melanoma. Less than the half92 (45.3%) reported that they do not know. Forty one (20.2%) subjects answered "any type of change in the skin", followed by discoloration 28 (13.8%), a new mole 22 (10.8%), skin rash 11(5.4%), a sore that won't heal5 (2.5%) and redness 3 (1.5%).

42.4% (n=86) reported that they do not know where melanoma is most likely to occur while 73 (36%) reported "Anywhere exposed to the sun". Thirty (14.8%) reported "Arms and legs", seven (3.4%), four (2.0%) and three (1.5%) reported "Head and neck", "Chest and stomach" and "Back" respectively.Further details are provided in table (2)

Table (2): Melanoma awareness

What is Melanoma?			
	Count	Percentage	Cumulative %
Don't know	48	23.6	23.6
Some kind of cancer	25	12.3	36.0
Some kind of skin cancer	130	64.0	100.0
Total	**203**	**100.0**	
What increases the risk of Melanoma?			
	Count	Percentage	Cumulative %
Bad sunburns in childhood	11	5.4	5.4
Being born with moles	2	1.0	6.4
Don't know	71	35.0	41.4
Family history of melanoma	43	21.2	62.6
Having lots of moles	1	.5	63.1
History of sun exposure	73	36.0	99.0
More than one reason	1	.5	99.5
Thin skin	1	.5	100.0
Total	**203**	**100.0**	
What are the early symptoms of melanoma?			
	Count	Percentage	Cumulative %
A new mole	22	10.8	10.8
A sore that won't heal	5	2.5	13.3
Any type of change in the skin	41	20.2	33.5
Discoloration	28	13.8	47.3
Don't know	92	45.3	92.6
Redness	3	1.5	94.1
Skin rash	11	5.4	99.5
Total	**203**	**100.0**	
Where is melanoma most likely to occur?			
	Count	Percentage	Cumulative %
Anywhere exposed to the sun	73	36.0	36.0
Arms and legs	30	14.8	50.7
Back	3	1.5	52.2
Chest and stomach	4	2.0	54.2
Don't know	86	42.4	96.6
Head and neck	7	3.4	100.0
Total	**203**	**100.0**	

Melanoma self-examination (N=203):

The greater number of subjects 196 (96.6%) reported that they never examined their skin for melanoma while only 7 (3.4%) reported that they did. Of which, five (2.5%) subjects examined their skin once yearly, one (0.5%) subject reported once monthly and another one (0.5%) reported once weekly.

Subjects were also asked about what they look for on their skin while self-examination and the results showed that two subjects(1%) reported "Things that weren't there before", one reported (0.5%) "Blotchy skin or dark spots", one (0.5%) reported "Changes in moles", one (0.5%) reported "Dry, itchy, or scaly skin" and another one (0.5%) reported "New moles".

More details are provided in table (3)

At last, we asked the subjects why they do not examine their skin and the answers were as follows;

The majority of subjects 130(64%) said that they never think about it while 29 (14.2%) said that there is no reason to worry. Fourteen (6.9%) subjects did not know what to look for, 10 (4.9%) did not know what to do, seven (3.4%) did not have the time and only four (2%) were frightened to find something.

Table (3): Melanoma self-examination

Have you ever examined your skin for melanoma?			
	Count	Percentage	Cumulative %
No	196	96.6	96.6
Yes	7	3.4	100.0
Total	**203**	**100.0**	
If yes, how often do you examine your skin?			
	Count	Percentage	
Once Monthly	1	.5	
Once weekly	1	.5	
Once yearly	5	2.5	
If yes, what do you look for on your skin?			
	Count	Percentage	
Blotchy skin or dark spots	1	.5	
Changes in moles	1	.5	
Dry, itchy, or scaly skin	1	.5	
New moles	1	.5	
Things that weren't there before	2	1.0	
If no, why don't you examine your skin?			
	Count	Percentage	
Didn't know what to look for	14	6.9	
Don't have time	7	3.4	
Don't know what to do	10	4.9	
Frightened to find something	4	2	
Never think about it	130	64.0	
There is no reason to worry	29	14.2	

DISCUSSION

Many studies have been conducted investigating patterns of skin cancer in the Saudi population[7,8], however, there is limited data about the extent of the Saudi knowledge about melanoma and performing skin self-examination (SSE)

The aim of this cross-sectional study was to investigate the current knowledge and self-examination practices of melanoma in Saudi Arabia. A total of 203 subjects from Saudi Arabia took part in this study.

A similar study conducted by (Miller et al., 1996) reported that around 42% of those surveyed were unaware of melanoma while in our study, the percentage was almost the half, as about 24% of our population lacked information about melanoma. The same study reported that 55% knew it was a type of cancer, and 34% specifically knew it was a type of skin cancer, while in our study, 64% and 12% were reported respectively.

Our study revealed that 35% of the surveyed population did not know the risk factors for melanoma while in another two studies conducted in Turkey and the United States[4,9], it was found that 49% and only 5%, could not identify at least one risk factor for melanoma.

According to literature, sun exposure, bad sunburns in childhood and being born with moles are some of the major risk factors for skin cancer and specifically melanoma[4,7,8,10,11].

Our results showed that around 45% failed to identify the early symptoms of melanoma, 20% reported any type of change in the skin, 14%reported discoloration and 11% reported new moles. These findings were quite different than those reported by Miller etal.37%, 4.5%, 4% and 4.5% respectively[4].

In contrast, our results showed that 97% reported that they never examined their skin for melanoma while in Miller et al. only 54% reported the same[4].

CONCLUSION

Despite the fact that the majority of our population was aware of melanoma, around 97% reported they never examined their skin for it.

In conclusion, our study suggests designing and implementing awareness campaigns and programs to highlight the importance of melanoma early detection and skin self-examination.

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