

Survey on the mammographic screening program and breast cancer awareness in Muş, socioeconomically the least developed city in Turkey; a population based, cross-sectional study

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Abstract

Background

Despite of increase in breast cancer (BC) incidence, mammography screening (MS) rates remain low especially in low educated populations (1, 2). Herein we aimed to find the MS rate and to study the factors associated with BC screening in Mus.

Patients and Methods

2420 women aged 40-69 years and living in Mus, were planned to be questioned. A multiple-choice questionnaire was used to obtain information regarding patient demographics, and patient knowledge on BC and MS.

Results

2054 women accepted to be surveyed (participation rate: 85%). MS rate was 35%. Women aged 50-59 years (42%, $p < 0.001$), having annual OB-GYN visit (42%, $p < 0.001$), reading ≥ 1 newspaper a day (44%, $p = 0.003$), having Social Security (39%, $p = 0.006$) had higher MS rate. Women, who declared doctors as their main source of information on BC (42%, $p < 0.001$), who knew BC is the most common cancer in females (36%, $p = 0.024$), who agreed BC is curable if detected early (36%, $p = 0.016$), who knew MS is free of charge (42%, $p < 0.001$), and who agreed to the phrase "I would get a mammography, if my doctor orders" (36%, $p = 0.015$) had a higher MS rate. Women, who believed that mammography exposes to unnecessary radiation, had a lower MS rate (32%, $p = 0.002$).

Conclusion

To increase participation to MS in undereducated populations, clear messages pointing out survival benefits, MS initiation age and frequency should be given using audiovisual media more efficiently. The messages should also put emphasis on MS being free of cost and not causing BC. In addition doctors from all specialties should inform and refer women to MS programs.

Background

● Despite of increase in breast cancer (BC) incidence, BC awareness and mammography screening (MS) rates are low in low educated populations (1,2).

● The aims of this study are to evaluate MS and BC awareness, and to find barriers against MS in Mus.

Patients & Methods

● In this cross-sectional study, 2420 women aged 40-69 years and living in Muş, were targeted.

● A survey was used to get information on demographics, knowledge on BC and breast health practices.

● Having a screening mammogram in 2 years was accepted as MS (+).

Results

● 2054 women were surveyed (participation rate: 85%)

● Overall MS rate = 35%

- Women aged 50-59 years
 - Annual OB-GYN visit
 - Reading ≥ 1 newspaper/day
 - Having Social Security
- MS rate ↑
(Table 1)

● Women, who declared:

- Doctors as their main info source on BC
 - BC is most common cancer in females
 - BC is curable if detected early
 - MS is free of charge
 - I would get mammography (Mg), if my doctor orders.
- MS rate ↑
(Table 2)

● Women, who believed:

- Mg exposes to unnecessary radiation = MS rate ↓
(Table 2)

Table 1. Correlation between descriptive factors and mammography screening (MS)

		MS (+)	MS (-)	p (univariate)	p (multivariate)
Age intervals (y)	40-49	320 (30)	749 (70)	<0.001	<0.001
	50-59	253 (42)	344 (58)		
	60-69	106 (36)	187 (64)		
Annual OB-GYN visit	Yes	184 (42)	256 (58)	0.001 OR 2.208 [1.716-2.841]	<0.001
	No	498 (33)	999 (67)		
Reading ≥ 1 newspaper/day	Yes	71 (44)	90 (56)	0.007 OR 1.561 [1.126-2.165]	0.003
	No	577 (34)	1142 (66)		
Insurance status	Not insured	31 (24)	97 (76)	< 0.001	0.006
	Social security	489 (39)	780 (61)		
	Green Card	136 (29)	339 (71)		
	Private Insurance	18 (31)	41 (69)		

Data are presented as n (%) unless noted otherwise

Table 2. Correlation between breast cancer awareness and mammography screening (MS)

		MS (+)	MS (-)	p
What is your information source on breast cancer?	Doctors/Nurses	313 (42)	442 (58)	<0.001
	TV/Radio	303 (36)	545 (64)	
	Friends/Relatives	259 (32)	542 (68)	
What is the most common cancer in females?	Breast cancer	612 (36)	1092 (64)	0.024 OR 1.423 [1.046-1.936]
	Other cancers	63 (28)	160 (72)	
Is breast cancer curable if diagnosed early?	Yes	632 (36)	1138 (64)	0.016 OR 1.633 [1.094-2.439]
	No	34 (25)	100 (75)	
Did you know screening mammography is free of cost?	Yes	384 (42)	532 (58)	<0.001 OR 1.756 [1.455-2.12]
	No	298 (29)	725 (71)	
Do you agree Mg exposes to unnecessary radiation	Yes	365 (32)	771 (68)	0.002 OR 1.363 [1.124-1.653]
	No	291(39)	451 (61)	
I would get Mg if my doctor wants.	Yes	628 (36)	1126 (64)	0.015 OR 1.613 [1.096-2.373]
	No	37 (26)	107 (74)	

Data are presented as n (%) unless noted otherwise

References

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