VLORA`S WOMEN AND CERVICAL CANCER HEALTH BELIEFS

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Abstract

Cancer in general in Albania is an increasing problem and cervical cancer is the ***third most common*** gynecologic ***cancer*** among all ***women***. Refer to European Code Against cancer an important action for women to help to prevent cervical cancer is to take part in organised cancer screening programmes. The study aims to identify in women health beliefs about cervical cancer. This is a transversal and analytical study with a sample of 210 healthy women from Vlora city with different socio-economic and educational levels. A self-administered questionnaire that assesses the health beliefs components about cervical cancer was the data collection instrument. The results highlighted low risk perception relative to cervical cancer. Most of women believe that cervical cancer as dangerous as all the other cancers and uncertainties about the chances to recover from it exist among them. Misunderstandings and high sensitivity relate to cervical screening. Relationship between perceived benefits, emotional, economic barriers and Pap test uptake was found. Large numbers of women never screened. The results indicated that to improve the women's attitudes to health, to encourage adherence to cervical screening and to avoid misconceptions due to lack of information conversations with health operators and the designing of effective prevention strategies based on health beliefs are fundamental.

Keywords: Women, health beliefs, barriers, cervical cancer, screening

Introduction

The cancer in general in Albania is an increasing problem. In the absence of the National Cervical Screening Program, cervical cancer is diagnosed in the last stage, therefore incurable with high prevalence in deaths, despite the fact it may be detected early (NCCP 2011, p. 30). Cervical cancer is caused by sexually transmited infection with certain types of Human Papilloma Virus [HPV] (WHO, 2013). Infection with HPV is common, and in most people the body can clear the infection by itself, but sometimes the infection does not go away and becomes chronic, especially when it is caused by certain high-risk HPV types, can eventually cause cervical cancer. It can affect women of all ages, but is more common in the age group 30-35 years (Sastre-Garau X et al., 1996). Also, according to the American Cancer

Society (ACS, 2013) cervical cancer tends to occur in midlife and the risk of dying from cervical cancer increases as women age. The Papanicolau (Pap) smear (test) is the single most successful cancer screening tool in modern medicine. Based on evidence, screening via regular Pap test, which consists of specimen collection and interpretation of the cellular material decreases the incidence and mortality of cervical cancer (Justin Lappen & Dana R. Gossett 2012; Sengul D et al., 2014). Many low-income women do not have ready access to adequate health care services, including Pap smear. This means they may not get screened or treated for cervical pre-cancers (ACS, 2013). Reference to (WHO, 2013; NCI, 2014) regular screening of women between the ages of 21 and 65 years with the Pap test decreases their chance of dying from cervical cancer. If screening includes the Pap test and the HPV test, it should be repeated every 5 years. Refer to European Code Against cancer taking part in organised cervical cancer screening programmes help women to prevent cervical cancer (WHO, 2014). In conditions where the current cervical cancer screening programs and practices in Albania are, however casual or nonexistent (Poljak et al., 2013), the study based on the conceptual framework Health Belief Model (HBM) the most commonly used theory in health education, promotion and screening (National Cancer Institute [NCI], 2005) will assess women health beliefs about cervical cancer. From "Theory at a Glance: A Guide For Health Promotion Practice (Second Edition, 2005) in a base of HBM there are four concepts: perceived susceptibility, perceived severity, perceived benefits, perceived barriers. HBM suggests that behavior is also influenced by cues to action and self-efficacy. Perceived susceptibility or personal risk is the beliefs that a person has about the chances of getting a condition with potential change strategies to help the individual develop an accurate perception of his or her own risk. Perceived severity represented the beliefs about the seriousness of a condition and its consequences and recommended action. Perceived benefits are the beliefs about the effectiveness of taking action to reduce risk or seriousness and explain how, where and when to take action and what the potential positive results will be. Perceived barriers represent beliefs about the material and psychological costs of taking action with potential change strategies like reassurance, incentives, assistance and correct misinformation. Cues to action represent factors that activate "readiness to change" and provide "how to" information, promote awareness. Self-efficacy represent the confidence in one's ability to take action. Different studies found this model very valid and reliable tool in assessing and understanding the women's health beliefs, respect of cervical cancer and Pap test (Walsh JC, 2006; Tacken MA et al., 2007; Guvenc G et al., 2011).

Materials and methods

Purpose

The purpose of this study is to identify health beliefs about cervical cancer in normal women. To assess the prevalence of screening among them and if there are differences in health beliefs between women screened and not screened.

Method and samples

This transversal and analytical study was conducted with women who worked to several institutions and private enterprises in Vlora city between May and July in 2014. The sample study consisted of 210 normal women, with different socioeconomic and educational background.

The inclusion criteria were: Women in the target age group (25-65 years) old without history of hysterectomy.

The exclusion criteria were: Women outside the target age group (25-65) years old.

Data collection instrument

Data were obtained using a structured, self-administered questionnaire adopted in base of theoretical, conceptual framework Health Belief Model reference to survey instrument, the Cervical CAM of Cancer Research UK (2011). The questionnaire was divided into sections regarding beliefs of cervical cancer and Pap test. Also, included were general demographic characteristics and questions regarding Pap test utilization by women, in mode to assess the prevalence of screening. Ethical approval and support was granted by the respective Directors where the study was carried out. The study was also approved by the relevant ethics committee, and written informed consent was obtained from each participant. The questionnaire was completed by 234 women, but 24 of them did not meet the inclusion criteria of the study so were not included in the statistical analysis.

Data analysis

All the data were entered and analysed using Epi Info™ 7 software version 7.1.3.10 for Windows (CDC-Epi Info™). Descriptive statistics and Chi-square tests were used to analyse the data. Single table analysis were used to assess the association between components of Health Belief Model for cervical cancer and women who had a Pap test. P values ≤ 0,05 were accepted as statistically significant.

Results

- *Participant characteristics*

The sample consisted of 210 women, aged between 25 – 65 years old. Mean = 38.04, SD±9.34, whereas 150 (73.17%) of them were employed full time.

Table 1. *Level of education**

Variables	*n*	(%)
8-year school	39	18.57
High school	62	29.52
Professional school	13	6.19
University degree	79	37.62
Master degree	15	7.14
PhD degree	2	0.95

Table 2. *Marital status**

Variables	*n*	(%)
Married	171	81.43
Single	25	11.90
Divorced	12	5.71
Widowed	2	0.95

**p-value of all variables >0.05.*

- *Pap test uptake*

Table 3. *Pap test prevalence*

Variables	*Yes*	*No*
Have you ever had a Pap test	*N(%)*	*N(%)*
	87(41.43%)	123(58.57%)
If yes, how many time in the 5 past years		
Variables	*N*	*%*
1time	58	63.74
2 times	20	21.98
3times	11	12.09
More than 3times	2	2.20

- *Health beliefs components*

Perceived sensitivety

Table 4. *Perceived sensitivety and Pap test uptake*					
Variables		*How do you judge your risk to get cervical cancer*			*P- value*
		I have a big risk	I have a low risk	I don't know	
		N (%)	N (%)	N (%)	
Have you ever had a Pap test	Yes	15(17.86%)	27(32.14%)	42(50.0%)	0.345
	No	13(10.74%)	42(34.71%)	66(54.55%)	
		Do you believe that you have cancer lesions			*P- value*
		Yes	No	I don't know	
		N (%)	N (%)	N (%)	
	Yes	13(14.94%)	27(32.14%)	35(40.23%)	0.914
	No	17(13.82%)	53(43.09%)	53(43.09%)	

Perceived risk

Table 5. *Perceived risk and Pap test uptake*						
Variables		*How dangerous is cervical cancer compared with others*				*P- value*
		More dangerous than others	Equal to others	Less than others*	I don't know	
		N (%)	N (%)	N (%)	N (%)	
Have you ever had a Pap test	Yes	18(45.%)	50(44.64%)	7(23.33%)	12(42.86%)	0.1903
	No	22(55.0%)	62(55.36%)	23(76.67%)	16(57.14%)	
		Chances to heal from cervical cancer				*P- value*
		Good chances	Not so good	I don't know		
		N (%)	N (%)	N (%)		
	Yes	32(41.56%)	41(46.59%)	14(31.82%)		0.267
	No	45(58.44%)	47(53.41%)	30(68.18%)		

**p-value of all variables >0.05, exclude less dangerous than others, p=0. 05.*

Perceived benefits

Table 6. *Perceived benefits and Pap test uptake*					
Variables		*Do you feel satisfied after the Pap test exam*			*P- value*
		Yes	No	I don't know	
		N (%)	N (%)	N (%)	
Have you ever had a Pap test	Yes	68(78.16%)	2 (2.3%)	17(19.54%)	*0. 0001*
	No	59(48.36%)	5(4.1%)	58(47.54%)	
		Is useful the regular Pap test examination			*P- value*
		Yes	No	I don't know	
		N (%)	N (%)	N (%)	
	Yes	84(96.55%)	1(1.15%)	2(2.3%)	*0.000*
	No	86(70.49%)	7(5.74%)	29(23.77%)	
		Pap test can detect cancer lesions before symptoms			*P- value*
		Yes	No	I don't know	
		N (%)	N (%)	N (%)	
	Yes	52(59.77%)	4(4.60%)	31(35.63%)	0.0005
	No	40(32.79%)	12(9.84%)	70(57.38%)	

Emotional barriers

Table 7. *Emotional barriers and Pap test uptake*					
Variables		*The Pap test exam is painful*			*P- value*
		Yes	No	I don't know	
		N (%)	N (%)	N (%)	
Have you ever had a Pap test	Yes	23(26.44%)	57(65.52%)	7(8.05%)	*0. 000001*
	No	23(26.44%)	26(21.31%)	73(59.84%)	
		Doing a gynecologic exam is discomfortable			*P- value*
		Yes	No	I don't know	
		N (%)	N (%)	N (%)	
	Yes	24(27.59%)	63(72.41%)	0(0.0%)	0.015
	No	41(31.31%)	73(59.35%)	9(7.32%)	

Economic barriers

Table 8. *Economic barriers and Pap test uptake*				
Variables		*Pap test is necessary if you don't have problems*		*P- value*
		Yes	No	
		N (%)	N (%)	
Have you ever had a Pap test	Yes	76(44.44%)	95(55.56%)	*0. 063*
	No	11(28.21%)	28(71.79%)	
		Is expensive the Pap test examination		*P- value*
		Yes	No	
		N (%)	N (%)	
	Yes	45(35.16%)	83(64.84%)	*0.022*
	No	42(51.22%)	40(48.78%)	
		Economic impossibility affects the regular screening		*P- value*
		Yes	No	
		N (%)	N (%)	
	Yes	56(37.09%)	95(62.91%)	0.045
	No	31(52.54%)	28(47.46%)	
		Limited access of Pap service affects the regular screening		
		Yes	No	
		N (%)	N (%)	
	Yes	63(41.18%)	90(58.82%)	1.00
	No	24(42.11%)	33(57.89%)	

Feelings of anxiety

Table 9. *Feelings of anxiety after Pap test and Pap test uptake*				
Variables		*Fear of the results*		*P- value*
		Yes	No	
		N (%)	N (%)	
Have you ever had a Pap test	Yes	44(34.38%)	84 (65.63%)	*0. 009*
	No	43(53.09%)	38(46.91%)	
		Can you speak freely about cancer		*P- value*
		Yes	No	
		N (%)	N (%)	
	Yes	51(40.16%)	76(59.84%)	*0.666*
	No	36(43.90%)	46(56.10%)	
		I will be very scared if I reveal to have cancer		*P- value*
		Yes	No	
		N (%)	N (%)	
	Yes	72(40.68%)	105(59.32%)	0.320
	No	15(46.88%)	17(53.13%)	

Cues to action

Table 10. *Cues to action and Pap test uptake*

Variables		*Promotional campaigns on television and radio*		*P- value*
		Yes	No	
		N (%)	N (%)	
Have you ever had a Pap test	Yes No	28(32.18%) 54 (43.90%)	59 (67.82%) 69(56.10%)	*0.11*
		Conversations with health operators		*P- value*
		Yes	No	
		N (%)	N (%)	
	Yes No	82(94.25%) 91(73.98%)	5(5.75%) 32(26.02%)	*0.00009*
		Conversations in community		*P- value*
		Yes	No	
		N (%)	N (%)	
	Yes No	23(26.44%) 27(21.95%)	64(73.56%) 96(78.05%)	0.51

Discussion

The general characteristics of the participants shows that the average age of women was 38.04 years, and 73.17% of them were employed full time.

37.62% of women in the study (table 2) had university degree, followed by high school diploma, with 29.52%.

Table 2, shows that 81.43 % of women were married and 11.90% were single. Level of education (Table 1), employment and marital status shows no a statistically significant ($p>0.05$) association between women screened and not screened. This is in contrast with other studies were women with a lower educational level reported being screened less than those with higher level (Kristensson JH et al., 2014). Also, in other studies the most significant predictors of Papanicolaou test use were marital status (being married), the lack of barriers, a family history of the cancer, older age, and increased perception of seriousness (Boonpongmanee C et al., 2007; Berardi R et al., 2013).

Cervical cancer is a preventable disease, and a key aspect of its prevention is the detection of the premalignant lesion by cervical screening. (Morris M et al., 1996). But, in our study, as shows the Table 3, 58.57% of women reported that they never had a Pap test in their lives. Reason indicated was the lack of gynecological problems, so they did not need Pap test screening. However, 63.74% of the women screened reported that in the five past years had a Pap test only once.

Table 4 shows perceived sensitivety and its association with Pap test uptake. No statistically significance ($p>0.05$) association between women screened and not screened for this component of HBM was found. The largest percentage of women screened and not screened report that don`t know the risk that they have to get cervical cancer. However, in same means women screened and not screened reported to have low risk to get cervical cancer. The same situation presented for the belief that women have if they have cancer lesions. Factors perceived as lack of sensitivity and negligence about cervical cancer were found in previous studies (Ersin F, et al., 2013)

Table 5 shows perceived risk and its association with Pap test uptake. No statistically significant ($p>0.05$) association between women screened and not screened was found for this component. The two groups of women presented with same means regarding the danger of cervical cancer and the chances to heal from it. The only difference in means reported for

the variable less than others where women not screened had the highest percentage (76.67%). Also, this group reported the highest percentage (68.18%) that they don`t know what are the chances to heal from cervical cancer. That demonstrates that perceived sensitivity and perceived risk to cervical cancer and health motivation is quite low. Even if HBM suggests that personal risk is associated with potential change strategies to help the individual develop and accurate perception of his or her own risk. A study conducted by Lee et al (2002) ***identified*** that a large proportion of women who do not have regular smears, have a low perceived susceptibility. Also, a study conducted among low-income women found misperception of them about their perceived risk of cervical cancer (Asiedu GB et al., 2014)

Table 6 shows perceived benefits and its association with Pap test uptake. This results were statistically significant (p=0.0001) for the variable if they feel satisfied after the Pap test exam. As shows Table 6, 78.16% of women screened report high level of sadisfaction. There was also an association between women screened and if Pap test can detect cancer lesions before symptoms (p=0.0005).

Table 7 shows emotional barriers and its association with Pap test uptake. It was found a correlation between the two groups of women and the knowledge if Pap test exam is painful (p= 0.000001). Also, 65.52% of women screened report that Pap test exam is not painful. 31.31% of women not screened report that doing a gynecologic exam is discomfortable.The relationships between patterns of multiple health behaviors and use of recommended cancer-screening tests was demonstrated (Meissner HI et al., 2009)

Table 8 shows economic barriers and its association with Pap test uptake. For this component of HBM were included four variables. There's ***not*** a ***statistically significant*** difference ***between*** the two groups of women regarding the question; if Pap test is necessary in absence of problems; even though 44.44% of women screened and 28.21% of women not screened reponded yes. Statistically significant p value =0.022 cited about the cost of Pap test exam. 51.22% of women not screened report that Pap test is expensive. Also it was found a correlation between the two groups of women and if the economic impossibility affects the regular screening (p= 0.045). Almost half of women not screened agree the fact that the regular examination depends on it. The results of our study are similar with other studies were economic inequalities in the use of cancer screening are higher in countries without population-based cancer screening programmes. (Palència L et al., 2010). Also a study found that patients with some form of health insurance were more likely to have had a health maintenance visit for breast, cervical, and/or colorectal cancer screening (Carney PA et al., 2012).

Table 9 shows feelings of anxiety and its association with Pap test uptake. Statistically significant p value = 0.009 was found for the fear of Pap test results. 53.09 % of women not screened report to have fear for the results. Even if for the other variables about anxiety was not found a ***statistically significant*** difference ***between*** the two groups of women, most of women who had had a Pap test and those who had never had one, report that could not speak freely about cancer and cancer scared them especially if the test reveals positive results. Fear, inadequacy of health insurance and financial problems were frequently addressed in previous studies.(Ersin F et al.,2013).

Table 10 shows cues to action and its association with Pap test uptake. For this component of HBM, 43.90% of women not screened report that promotional campaigns on television and radio are effective ways to increase the knowledge and participation in screening.

Conversations with health operators were statistically significant (p=0.00009), where 93.25% of women screened and 73.98% of women not screened found them very effective. Also, conversations in community were cited by the women of the two groups with ***not statistically significant*** difference. A study conducted by Gillam SJ (1991) which analyzed

the contribution of the health belief model in cervical screening identified numerous ways of encouraging uptake. Those cited by women`s in the study were, also included.

Conclusion

This study identified a series of women`s health beliefs about cervical cancer and it screening. Most of the perceived barriers identified were statistically significant. These perceived barriers (as cited in the study were previously studied using the Health Belief Model) influenced attendance rates at cervical cancer screenings globally.

The results of the study suggests that we can increase attendance on screening, informing women of their susceptibility to cervical cancer, and encouraging a belief that active participation can minimize the likelihood of developing invasive cervical cancer.

All this it could be possible enhancing the communication. That, also was highlighted by the women participating in the study. Comunication about disease, in this case about cervical cancer and screening is not a one way process so we as health personnel need to understand the women`s perceptions and concers and respond to them. Addressing perceived barriers will help eliminated negative attitudes towards attending cervical screening.

So, to improve the women's attitudes to health, to encourage adherence to cervical screening and to avoid misconceptions due to lack of information conversations with health operators and the designing of effective prevention strategies based on health beliefs are fundamental.

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