

## ORIGINAL PAPER

### Self-Esteem and Breast Self-Examination of Women Prisoners

**Deniz Harputlu, Ph.D ( c )**

Ege University, Community Health Nursing Department, Bornova, Izmir, Turkey

**Ayla Bayık Temel, PhD**

Professor, Ege University, Community Health Nursing Department, Bornova, Izmir, Turkey

**Correspondence:** Deniz Harputlu, Ph.D ( c ) Ege University, Community Health Nursing Department, Bornova, Izmir, Turkey. **E-mail:** deniz.harputlu@deu.edu.tr deniz37@mynet.com

#### Abstract

**Aim:** This study explored the relationship between self esteem and breast self examination (BSE) knowledge and practice of women prisoners in Turkey.

**Methods:** The research was conducted in nine prisons located in the Aegean Region of Turkey. For the data collection, the questionnaire forms prepared by the researchers, were to evaluate the socio-demographic characteristics of women prisoners, and to assess their knowledge and the performing of Breast Self Examination (BSE), and the Coopersmith Self-Esteem Measurement Scale, suitably modified to the Turkish context have been used. Data were, collected by visiting directly each prison and structured interviewing with the imprisoned women.

**Results:** Self-esteem mean score of women prisoners is  $59.24 \pm 18.94$  (max 100, min 0) . Women prisoners have unsatisfactory BSE knowledge and performing BSE is low.

**Conclusion:** Turkish women prisoners' Breast Self Examination knowledge and performing was poor and their level of self-esteem was average.

**Key words:** female prisoners, self esteem, breast self examination, health promotion, forensic nursing, Turkey

#### Introduction

İçli, (2000) defines crime as an action, behavior and an attitude which gives harm to the public as accepted and stated by the law maker (İçli, 2000). Prisons, just like hospitals, are places where each citizen can unexpectedly find themselves in residence. Early detection of breast cancer entails both early diagnosis in symptomatic women and screening in asymptomatic women (Anderson et al, 2003).

It is clear that the crowded living conditions, closed place, limited exercise, diet, change in human relations, lack of social support in prisons affect negatively the physical and psychological health and self-esteem of women prisoners. Prisoners are apart from the activities that cultivate and develop human personality, and their benefiting from health services is limited (Çobanoğlu, 1996). Nevertheless, it is a human right for woman prisoners to be able to access available the basic treatment and care, and for their health to be

protected and if possible by strengthening them. This care is provided by nurses in European countries and the United States of America (USA) within the content of prison nursing and forensic nursing. Turkey is experiencing a shortage of nurses and nurses are not employed in prisons. This fact alone requires some action in terms of policy change with in Turkey towards the healthcare needs and support of women prisoners faced with the problems of having limited access to primary health care, which includes the prevention or early detection of diseases. These diseases are not confined to the purely physical but can present as complex mixes of mental health, emotions and spiritual aspects of wellbeing all of which are placed under duress as part of the Turkish prison system.

Self-esteem is an indicator of how the balance between emotions, depression and other mental health conditions are judged by the individual. Such self-assessment can bring about poor or

negative states of mind. Dinç and Hortun (1993) in their articles, cite that Fontaine and Coopersmith (1967) discuss that self-esteem consists of a series of attitudes of the individual, which have continuity about self. Accordingly, self esteem is one's satisfaction of him/her and his/her self-regarding as valuable, positive, and worth being, liking and loving him/herself. Thus, self esteem is a positive psychology which enables one to accept actual him/herself as he/she is and to trust him/herself (Dinç & Hortun, 1993; Tufan & Yıldız, 1993).

One of the important illnesses that negatively affects of women's health and causes to body change is breast cancer (Uçar, Uzun, 2008). Breast cancer is the most commonly seen and cause of cancer deaths in women in most of the developed and developing countries (Budden, 1998; Özmen, 2009). Epidemiological data show that one in eight women in United States of America and one in 10 women in Europe will develop breast cancer at the same time during their lives (Mahon, 2003; Smith et al., 2003). In Turkey, breast cancer is the most common cancer in women and represents 24.1 percent of all kind of cancers in women (Ministry of Health of Turkish Republic, 2007). Breast cancer is the most researched cancer type in terms of its psychological and psychosocial aspects among other cancer types because it is a threat against the organ symbolizing femininity and sexuality as well as because it is the most common cancer among women (<http://www.die.gov.tr>; Alican, 1993; Loescher, 2004; Baxter, 2001)

Breast self examination (BSE) is self-examination of the breast by women because of the fact that women know its structure of breast and can realize changing in the breast in early time (Anderson et al., 2003; Gürsoy, 2008). It has been reported that early diagnosis of breast cancer is related to the frequency of BSE (Janda et al., 2002).

Health Promotion literature regarding women's health care issues in prison is lacking in Turkey. This study investigates the question of; is there any correlation between self-esteem and BSE knowledge and perform breast self-exams among women prisoners? The hypotheses below down were tested;

- 1) Women prisoners have low self-esteem
- 2) The BSE knowledge level of women prisoners is low

3) Performing breast self-examination amongst women prisoners is poor.

### Methods

**Design and sample:** Descriptive and correlational research was conducted in prisons of nine cities in the Aegean Region of Turkey in 2005. All of the women prisoners (198) included the population of the research. There was not any inclusion or exclusion criteria. The researcher read the questionnaire forms to the illiterate woman prisoners to understand the questionnaires and be clear to respond. Then researcher wrote the illiterate woman prisoners' answer to the questionnaire forms and checked orally with the subjects that the words were correct. One hundred sixty one volunteered woman prisoners participated to this study (Participation rate was 81.3%).

**Measures:** Three different forms as data gathering tool prepared by researchers were used for data collection. These are;

1) Socio-demographic characteristics form: This form is composed of 14 questions to determine the general socio-demographic characteristics, their imprisonment features, family history of breast cancer, and habits of smoking, drinking alcohol or taking drugs of women prisoners.

2) The Coopersmith Self Esteem Scale: This inventory developed by Stanley Coopersmith in 1967 is a measurement tool used in evaluating the person's attitude about him/herself in various fields (Coopersmith, 1967). To use this inventory permission was taken from Beril Tufan who carried out Turkish reliability of this inventory via e-mail. There are 25 statements that can be marked as "like me" or "not like me" in this inventory. Answers are evaluated according to scale's answer key. Each of correct answer is scored with 1 and each of incorrect answer is scored with 0. The maximum score is 25 and the minimum is 0 of this inventory. When one's the overall score is multiplied with 4, the person's self esteem inventory score is determined (max 100, min 0). The inventory statements are related to a person's viewpoint about life, the family relations, social relations, and strength of resistance. This inventory has the flexibility to measure the individualized decisions needed to become a leader, to prove her/himself, to regard her/himself inferior, as well as attitudes related to the family (Tufan & Yıldız, 1993).

3) Assessment form for Breast Self Examination (BSE) knowledge level and performing BSE: This form was developed by the researchers to assess the knowledge and performing of BSE among women prisoners, according to Turkish National Family Planning Guidelines. This form is composed of 13 true-false questions. The knowledge (8) and performing BSE (5) questions were prepared. The highest score to be taken from the BSE knowledge is 80, and the highest score to be taken from performing BSE is 50.

### Data Collection

Data were collected by interviewing with the women prisoners in the meeting hall by the first named researcher. The goal of the research was explained to all women prisoners. Illiterate women were assisted in filling the forms. The time required for the interview was 25 minutes.

### Analytic Strategy

The data was evaluated by descriptive statistics (means, standard error), student t-test, and correlational analysis. Differences between the groups were considered significant if the p value was less than 0.05.

### Ethical Explanations

Permission was taken from the Ministry of Justice of Turkish so that the data could be collected in the prisons. Each woman was informed about the goal, importance and the content of the research and was reminded that she is free whether to participate or not in the study and their approval was taken for their voluntary participation. Moreover, it was explained to women that their identities would not be asked for and that the information would be kept secret. It was also emphasized the freedom of participants to terminate the interview process without reason. Interviews were conducted in a private, secure setting.

### Results

The average age of women prisoners is  $33.74 \pm 0.83$ , 42.9% of them are married, and 27.3% are not literate. It is determined that 16.8% of the women were sentenced to 0-59 month imprisonment and 73.3% of them were in prison for 0-24 months.

Among the women 50.9% of them stated that they have been living with only their husband and

children (in a nucleus type of family) and 35.4% are housewife and 75.8% have children and 57.1% of them reported that her monthly income level is lower and does not meet the expenses. While 50.3% of women defined her health status as fair, but 37.4% of them stated that they didn't have medical problems, 48.4 % of the women are smokers, and 10.0% of them had a habit of consuming alcohol before imprisonment (Table-1).

There were statistical differences between the self-esteem scores and the variables of education, family structure, and income level ( $p < 0.05$ ) (Table-2). Women's BSE knowledge average score was found to be  $31.94 \pm 1.97$  and the average score for performing BSE was  $5.09 \pm 0.82$ .

The average score of self-esteem was found as  $59.24 \pm 18.94$ . This score shows that women prisoners have average self-esteem level. No statistical differences were determined between the self-esteem scores of women and some characteristics such as age, marital status, having a job, having unhealthy habits, certain punishment periods and the location of the prison ( $p > 0.05$ ). But,

There is a family history of breast cancer amongst close relatives of 6.9% of women. Among the women, 52.1% of respondents stated her reason for not practicing BSE to be lack of knowledge. Women who applied BSE is only 24.9% and 52.2% of them reported that they had heard of BSE, 52.1% of women who did not practice BSE stated that they didn't apply it because they didn't know how to perform. The BSE knowledge level of women prisoners was determined not to be affected by age, family structure, marital status, job, income, having unhealthy habits, a certain punishment period, and the location of the prison ( $p > 0.05$ ).

It was observed that, there was a statistical difference between BSE knowledge levels and education ( $p < 0.05$ ) (Table-2).

The BSE practice behavior score of women prisoners was determined not to be affected by age, family structure, marital status, job, income, having habits of smoking and consuming alcohol ,a certain punishment period, and location of the prison ( $p > 0.05$ ) (Table-2).

<b>Table 1- Demographic and Social Characteristics Of The Women Prisoners</b>			
		<b>Number</b>	<b>%</b>
	<b>Marital Status</b>		
	<b>Married</b>	69	42.9
	<b>Education Level</b>		
	<b>Not literate</b>	44	27.3
	<b>Family Construction</b>		
	<b>Nucleus Type</b>	82	50.9
	<b>Income Level</b>		
	<b>Lower</b>	92	57.1
	<b>Having Children</b>		
	<b>Have children</b>	122	75.8
	<b>0-59 months</b>	27	16.8
	<b>Duration of imprisonment</b>		
	<b>0-24 months</b>	118	73.3
	<b>Profession/job</b>		
	<b>House wife</b>	57	51.4
	<b>Health status</b>		
	<b>Fair</b>	81	50.3
	<b>Medical Problems</b>		
	<b>Have no medical problem</b>	73	37.4
	<b>Unhealthy Habits</b>		
	<b>Smoking</b>	78	48.4
	<b>Consuming alcohol</b>	16	10.0

**Table 2-** The Relation Between Demographic and Social Characteristics of Women Prisoners and Self-esteem Score, BSE Knowledge Score, Performing BSE Score

Demographic and Social Characteristics	Self-esteem Score	BSE Knowledge Score	Performing BSE Score
Age	X	X	X
Education Level	√ f=8.972	√ f=6.558	X
Family structure	√ f=6.343	X	X
Marital Status	X	X	X
Profession/Job	X	X	X
Income Level	√ f= 5.329	X	X
Unhealthy Habits	X	X	X
Duration of Penalty	X	X	X

√-there is a relation                      X-there is no relation                      p=0.05

**Table 3-** The Relation Between Self-esteem Score, BSE Knowledge Score and Performing BSE Score of Women Prisoners

	Self-esteem Score	BSE Knowledge Score	Performing BSE Score
BSE Knowledge Score	√ 0,190		√ 0,396
Performing BSE Score	X	√ 0,396	
Self-esteem Score		√ 0,190	

√-there is a relation                      X-there is no relation                      p=0,05

While there is a very weak, meaningful, and positive correlation between the BSE knowledge score of women prisoners and the self-esteem scale score ( $r=0.190$ ), there is no correlation between self-esteem scores and BSE practice scores. In addition, a weak, meaningful and positive correlation was found BSE knowledge scores and BSE practice scores ( $r= 0.396$ ) (Table=3).

**Discussion**

Half of woman prisoners (50.3%) evaluated their health status as fair and only 37.4% of them stated that they had no health problems. Women who

reported that they had some symptoms for illness were 23.1%, and who stated that they had some illness diagnosed by physician were 39.5%. In studies which the Turkish Medical Association and Human Rights Association conducted, the prisoners had assessed their health level as not to be good (İzmir Barosu Cezaevleri Komisyonu, 2002, Soyer, 1999). As the participants of this study are at young age they might not have any health problems yet and subjectively they feel good themselves at the moment of data gathering.

In this study 48.4% of the women prisoners are smokers and 10.0% of them reported consuming of

alcohol. In a study by the Australian Institute of Criminology it was determined that addiction to drugs and alcohol is wide spread amongst women prisoners (<http://www.aic.gov.au>, 2003) In our study, the percentage of smokers amongst the women prisoners is higher than the prevalence of smoking amongst women (24.30%) in Turkey. The prevalence of substance abuse among female offenders in the USA is also high (Wright et al, 2007). Among State prisoners, over 60% of women met the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) criteria for having a drug dependence or abuse problem during the year prior to their incarceration, and 59% reported having abused substances in the month prior to their offence (Bureau of Justice Statistics, 2006).

In this study, women prisoners' self esteem scale average score was found to be as  $59.24 \pm 18.94$ . The highest score to be taken on this scale is 100 so, it could be said that the self esteem of women is at a medium level and the related hypothesis was not confirmed. Brewer and Baldwin (2001) also determined self esteem of women prisoners in the USA at medium and high levels. In our study, it was determined that there was no statistical difference between the self esteem scores of women prisoners and age, marital status, job, having habits of smoking and consuming alcohol, certain punishment period, and location of the prison ( $p > 0.05$ ). But statistical differences were found to be between the self-esteem scores and the variables of education, family structure and income of women ( $p < 0.05$ ). When the relation between education and self esteem was examined, it was seen that the more the education level increases, the more the self esteem level rises. When the relation between family structure and self esteem was examined, living in a broken family was found to be affecting self esteem negatively. Also, the self esteem of women prisoners who defined income as less than outlay is lower than those who define income as equal as or more than expenditures. Having income less than expenditure affects self esteem negatively.

The BSE knowledge score average of women in this study was determined to be as  $31.94 \pm 1.97$ . The BSE practice average score of them was determined to be as  $5.09 \pm 0.82$ . These averages show that woman prisoners have poor knowledge

of BSE and do not perform accurate BSE practice. In a study made by Noble and Alemango (2004) offered that women prisoners have inadequate information about BSE and early screening behaviors for breast cancer. These results could be compared with women in the Turkish community because of the limitation that our study is the only one applied on women prisoners. According to the finding of some regional studies carried out in Turkey, BSE practice among women is not common. In a study which was implemented by Güner et al (2007) she found that the BSE practice rate was 47.9%. In their study Çadır et al (2004) reported that the rate of women performing of BSE at regular frequency was 37.4%. In the study, which was made by Atlı (2002) to evaluate women's knowledge and risk comprehension of breast cancer and the BSE training program, the rate of women who regularly do BSE and find a mass in the breast was determined to be as 5.3%. Also in another study implemented by Brewer and Baldwin (2001) in USA, they found the rate of performing BSE among the woman prisoners as 26%.

Study results in our country and abroad, show that women do not have enough knowledge and practice about BSE. It may be the reason that they have lack of awareness and don't know the facts about Breast Cancer, believe that it won't happen to them and don't feel that doing a breast self exam is an important activity to detect breast cancer. There are some studies which produce proof to the contrary. For example, according to a meta-analysis in the Cochrane Collaboration, two large trials in Russia and Shanghai found no beneficial effects of screening by breast self-examination but do suggest increased harm in terms of increased numbers of benign lesions identified and an increased number of biopsies performed. They concluded, at present, screening by breast self-examination or physical examination cannot be recommended (Kösters, Gøtzsche 2003).

Although breast self-examination increases the number of biopsies performed on women, and thus revenue for the breast cancer industry, it does not reduce mortality from breast cancer. In a large clinical trial involving more than 260,000 female Chinese factory workers, half were carefully taught by nurses at their factories to perform monthly breast self-exam, and the other half were not. The

women taught self-exam detected more benign (normal or harmless lumps) or early-stage breast disease, but equal numbers of women died from breast cancer in each group (Thomas, Gao, Ray et al. 2002). Because breast self-exam is not proven to save lives, it is no longer routinely recommended by health authorities for general use (Harris, Kinsinger, 2002, Baxter, 2001).

In the study, family history of breast cancer in close relatives was determined 6.95% among women. Among women 52.1% of them stated their reason for not applying BSE was lack of knowledge. Women prisoners who reported applying BSE was just a quarter of respondents (24.9%), but 52.2% of them stated that they had heard of BSE. The women who don't apply of BSE stated that this is because they don't know how to do it. It is realized that lack of knowledge and motivation is the main reason for not applying of BSE. On the other hand, this group do not benefit from the services of health education and consultancy. The rate of learning and applying of BSE in women prisoners was determined to be very low. These findings might be due to the fact that the women are in prison and they cannot take advantage of health promotion services and have no benefit from health education and consultation support.

Champion and Menon (1997) states that variables that significantly predicted either frequency or proficiency of BSE are included susceptibility, benefits, confidence, knowledge, barriers, and a regular physician. (Champion, Menon, 1997). In Turkey in primary health care units and in all the hospitals services for breast examination by the physicians is available and health education is given by the nurses to the women for BSE in all health care services.

But there was some differences between the education level ( $p < 0.05$ ) and BSE knowledge scores. It was found out that the more the education level of woman prisoners have the more the BSE knowledge level increases. In a study carried out by Gözümlü, Karayurt, Aydın (2004), it was found that there is a relation between BSE knowledge and education level (Gözümlü, Karayurt, Aydın 2004). The fact that women with high level of education have greater BSE knowledge can be explained with the fact that they have more

motivation and chance of obtaining information about disease and protective behaviors, health promotion, prevention and so are more aware of health risks.

While there is a very weak statistical correlation between woman prisoners' BSE knowledge level and self esteem scores ( $r = 0.190$ ), it has been found that there is no relation between self esteem score and BSE practice scores. It has been determined that there is a weak, statistical, positive correlation between BSE knowledge level score and BSE practice scores ( $r = 0.396$ ). It was found in the study made by Brewer and Baldwin (2001) that woman prisoners' self esteem is at medium level, BSE knowledge level is low, and practice ratios are little. Also in the same study, it was determined that there isn't a correlation between BSE practice levels and self esteem scores (Brewer Baldwin 2001).

#### **Limitations**

One limitation of this study is that the political criminals were not taken into the research sample since the prison directors did not give permission. Another limitation is that results could only be generalized to the research sample.

#### **Conclusion**

This study demonstrates that women prisoners have average level of self-esteem and poor knowledge and practice of BSE. Findings indicate a weak correlation between BSE knowledge and self-esteem. Prisons just like hospitals are the places which each citizen can go for various reasons at an unexpected moment. In a country, the situation of prisons in a country is one criteria for civilization, like public schools and hospitals. Therefore, improvement in the circumstances of prisons is one of the indicators of our humanity in relationship to society deciding the punishments to fit the crimes. Each society makes its own decisions according to the culture, means and values attributed to members of the society whom transgress the law. The number of prisons and prisoners in Turkey and in the world is gradually increasing. Health should not be used as a punishment. These prisoners must be enabled to be healthy and fruitful people in prison and upon going out of prison. The following suggestions for improvement are made in view of this research.

- Woman prisoners must be given continuous health education regarding BSE and other health matters during the period from their entrance into the system to exit.
- To improve their self esteem, social actions, activity therapies, and activities for production should be arranged.
- The fact that breast cancer is so prevalent and that early diagnosis is crucial for survival, this reality must be emphasized and woman prisoners must be encouraged to perform BSE
- The health units and services in prisons must be reorganized and supported for health promotion with a particular concern to fulfill the health care needs of women in the prison system.
- There are no nursing employment positions in Turkish prisons. A nurse should be in charge in every prison for giving effective and continual health education and for providing nursing care for individuals having health problems.
- Universities and The Ministry of Justice must cooperate and collaborate to increase the health knowledge of prisoners by conducting studies together. More research on prisoners should be implemented.

In summary, this study highlights the inadequacy of women prisoners' in BSE knowledge and practice, the importance of employment of nurses in prisons, and the need for nurses and managers to reorganize health promotion services in the prisons for women.

## References

- Alican, F. (1993). Cancer. Nobel Medical Bookstore. İzmir (in Turkish)
- Akyolcu, N. The Positive Effect of BSE to Life Time in Women, The Bulletin of İstanbul University Florence Nightingale Nursing High School, 4(2), 15-18 (in Turkish)
- Anderson B, Brown S, Lim S, Smith RA, Taplin S, Thomas D (2003). Early detection of breast cancer in countries with limited resources. The Breast Journal., 9(2), 51-59
- Australian Institute of Criminology (2002). Women Prisoners and Correctional Programs. Trends and Issues in Crime and Criminal Justice Retrieved 29.09.2003 from <http://www.aic.gov.au> , Australia.
- Baxter N (2001). Preventive health care, 2001 update: Should women be routinely taught breast self examination to screen for breast cancer? Can Med Assoc J. 164:1837-1846.
- Brewer M, Baldwin D (2001). The relationship between self-esteem, health habits and knowledge of BSE practice in female inmates, Public Health Nursing , 17(1), 16-24
- Budden L (1998). Registered nurses' breast self-examination practice and teaching to female clients. J Commun Health Nurs., 15, 101-112.
- Bureau of Justice Statistics (2006). Special report: Drug use and dependence, state and federal prisoners, 2004. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.
- Coopersmith S. A (1959). Method for determining types of Self-esteem. J Abnorm Psychol, 59:87-94.
- Champion V, Menon U (1997). Predicting mammography and breast self-examination in African American women Cancer Nursing; 20(5) - 315-322
- Çadır G, Eksen M, Bütüner E, Tüzen H, Yetim H, Othman K, Arslan K (2004). The Determination of Knowledge and Practice About Breast Cancer and BSE of Women Who Live In Muğla, Bayır, Yerkesik and Yeşilyurt (the part of Egean Region) Retrieved September 29, 2004 from [www.insanbilimleri.com](http://www.insanbilimleri.com) (in Turkish)
- Çobanoğlu M, Çobanoğlu N (1996). The negative risk factors on psycho-social health and the ethical problems of prison doctors in the prisons. The Journal of Community and Physician, 11,75 (in Turkish)
- Diñç A, Hotun N (1993). The determination of self esteem and spiritual situation of İstanbul University Florence Nightingale Nursing School and Vocational School of Health students. The Bulletin of İstanbul University Florence Nightingale Nursing High School 7(28), 95-101(in Turkish)
- Gözüm S, Karayurt Ö, Aydın İ(2004). The results of Turkish adaptation of Champion' Health Beliefs Model Scale on Breast Cancer screening. The journal of HEMAR-G, 1(2), 71-85 (in Turkish)
- Güner İ, Tetik A, Gönener D (2007). The determination of knowledge, attitude and behaviors of women on BSE, Gaziantep Medical Journal, 55-60 (in Turkish)
- Gürsoy AA (2008). The paradox of BSE, TAF Prev Med Bull. 7(3), 257-260 (in Turkish)

- Harris R, Kinsinger LS (2002). Routinely teaching breast self-examination is dead. What does this mean?. *J. Natl. Cancer Inst.* 94 (19): 1420–1
- İçli T (2000). The Socio-culturel and economical determinatives of women criminalty in Turkey. The Minister of Justice, Education book, 2:10, Ankara (in Turkish)
- The comission of İzmir Bar\_\_(August 2001-September 2002). The evaluation report of İzmir Kırıklar prison. Retrieved August 11, 2003 from <http://www.izmirbarosu.org.tr> (in Turkish)
- Janda M, Stanek C, Nevman B, et al (2002). Impact of videotaped information to frequency and confidence of breast self-examination. *Breast Cancer Res Treat.* 73, 37-43.
- Kösters JP, Gøtzsche PC (2003). "Regular self-examination or clinical examination for early detection of breast cancer". *Cochrane Database Syst Rev* (2): CD003373.
- Loescher L (2004). Nursing roles in cancer prevention position statements. *Semin Oncol Nurs.* 20, 111-120.
- Ministry of Health of Turkish Republic, The statistics of Cancer in women Retrieved 07.12.2007 from <http://www.saglik.gov.tr/extras/statistics> 2001 (in Turkish)
- Mahon S, M (2003). Evidence-based practice: recommendations for the early detection of breast cancer. *Clin J Oncol Nurs.* 7, 693-696.
- Noble A, Alemagno S(2004). Breast Cancer and Women in Prison: Preventive Attitudes and Risk Factors *Journal of Correctional Health Care*, 10(2), 205-216.
- Özmen V et al (2009). Organizing Early Diagnosis And Screening Programs For Breast Cancer In Turkey, *The Journal of Breast Health*, 5 (3), 125-134 (in Turkish)
- Republic of Turkey, Prime Ministry Turkish Statistical Institute(Turkstat). 2005.(T.C. Başbakanlık Türkiye İstatistik kurumu). Retrieved June 3, 2005, from <http://www.die.gov.tr>
- Smith RA, Saslow D, Sawyer KA, et al (2003). American cancer society guidelines for breast cancer screening update. *CA Cancer J Clin.* 53, 141-169.
- Soyer A (1999). Prison and Health. *Turkisc Medical Association, İstanbul* (in Turkish)
- Thomas DB, Gao DL, Ray RM, et al. (2002). Randomized trial of breast self-examination in Shanghai: final results. *J. Natl. Cancer Inst.* 94 (19): 1445–57.
- Tufan B, Yıldız S (1993). Turn back duration of Second generation imigrants, *Hacettepe Univercity book series* (in Turkish)
- Turan N, Tufan B (1987). The reliability and validty study on inventory of Coopepersmith self-esttem inventory. The book of the congres of national psychiatry and norological sciences, p:816-817, İstanbul (in Turkish)
- Uçar T, Uzun Ö (2008). Examination Of Effect On Body Image, Self-Esteem And Marital Adjustment of Mastectomy In Women With Breast Cancer, the *journal of breast health*, 4 (3), 162-168 (in Turkish)
- Yavuzer, H (1993). *Child and Crime*, Remzi Bookstore, İstanbul (in Turkish)
- Wright EM, Salisbury EJ, Voorhis P (2007). Predicting the Prison Misconducts of Women Offenders The Importance of Gender- Responsive Needs. *Journal of Contemporary Criminal Justice*, 23(4), 310-340